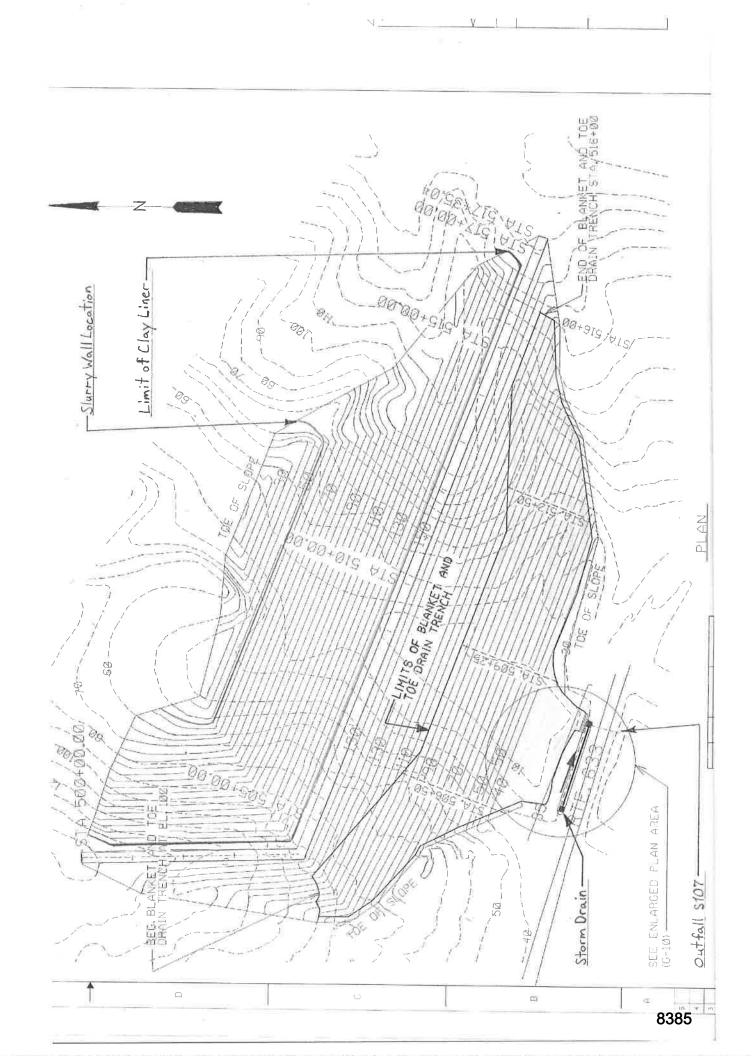
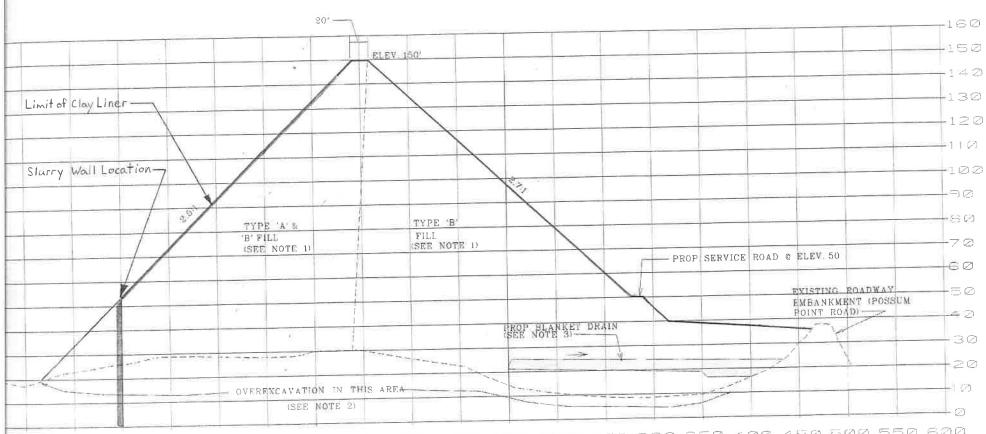


SECTION H - H (H-9)

NOTES:

- 1. CONTRACTOR SHALL LOCATE AND UNEARTH EXISTING 72" DIA. CULVERT.
- 2. EXISTING CULVERT SHALL BE CLEANED OF MATERIAL AND MATERIAL SHALL BE DISPOSED OF IN AN APPROVED MANNER. EXISTING "CONNECTING MANHOLE" SHALL BE REMOVED. SEE DWG 715932-C-103
- 3. AFTER EXISTING CULVERT IS CLEANED IT, SHALL BE INSPECTED FOR ITS FULL LENGTH BY THE CONSTRUCTION REPRESENTATIVE AND DESIGN ENGINEER.





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SECTION B-B (DWG, 715932-C-103)
SCALE: 1 - 50 II
1 - 20 V

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company Possum Point Power Station Coal Combustion Residual Surface Impoundment Closures Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

March 2016



Prepared by: GAI Consultants, Inc. Richmond Office 4198 Cox Road, Suite 114 Glen Allen, Virginia 23060 Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

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Possum Point Power Station
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Report Authors:

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1.2 Project Description

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Part of Dominion's plan for closure of the Station's ash ponds includes management of stormwater and groundwater associated with Outfall 010. Groundwater includes the Ash Pond D toe drainage. The purpose of this document is to present Dominion's groundwater separation plan for the Pond D toe drain. The VPDES Permit allows for redirecting Outfall 010 discharges, and contributing stormwater, groundwater, and Pond D toe drainage to Ash Pond D. The VPDES Permit also allows for the separation of flows under permit condition in Part 1.F.23.

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The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1. F. 23:

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3.0 Original System Description

The existing discharge at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D impoundment area and toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek via a Dominion owned 72-inch reinforced concrete culvert.

As illustrated by the original design drawings, attached in Appendix A, the storm sewer system contributing to Outfall 010 is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B drainage inlets running parallel on the north side of Possum Point Road. The upstream and downstream inlets are connected by 18-inch concrete pipe. The system discharges through the 72-inch-diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. As shown in Figure 1, the total contributing drainage area for surface water runoff to the two inlets is approximately twelve acres.

The horizontal drainage blanket and toe drain have been designed to collect infiltration through the earthen berm as well as groundwater which is diverted around the impoundment. The drainage blanket is comprised of a layer of VDOT No. 57 stone constructed under the Pond D embankment to prevent the buildup of pore water pressures in the downstream portion of the dam during the life of the disposal facility. This is a standard engineering practice for providing embankment stability. The toe drain contributions enter the storm sewer system through a two-foot square opening in the downstream drainage inlet. Refer to the Toe Drain Manhole Detail Sheet and Toe Drain Detail Sheet, attached in Appendix B and C respectively.

4.0 Interim Solution

4.1 Description

The Interim Solution consists of plugging the 72-inch reinforced concrete pipe (RCP) culvert and diverting the stormwater, groundwater, and Pond D Toe Drainage contributions to Ash Pond D in compliance with the Station's VPDES Permit (Refer to Figure 2 and the attached Drawing S-01 Reinforced Concrete Pipe). The 72-inch culvert has been cleaned of sediment with a cleanout nozzle and the water / sediment were removed concurrently by vac truck to an offsite facility for treatment and disposal. A temporary lumber and plywood bulkhead was constructed on the upstream end of the culvert at the existing inlet north of Possum Point Road. Plywood forms, held in place with steel reinforcement, were constructed for a one-foot-wide, cast-in-place concrete plug wall at the downstream end of the culvert. A sump pump was installed to collect Outfall 010 contributions and divert them to Ash Pond D. After the plug wall cured, flowable Portland Cement backfill was applied in lifts to fill the culvert.

A generator powered pump system was installed in the existing inlet north of Possum Point Road for all the collected water (stormwater, groundwater, and Ash Pond D Toe Drainage) to be diverted to Pond D.

4.2 Wet Weather and Dry Weather Considerations

The Interim Solution will operate during wet and dry weather conditions and all flow will be transferred to Pond D until the permanent solution is constructed that will mechanically separate the Pond D Toe Drainage from the stormwater.

4.3 Schedule

Dominion has submitted a Notice of Planned Change in February 2016 to implement the Interim Solution. The Interim Solution will remain in service until the Permanent Solution can be implemented.

5.0 Permanent Solution

5.1 Description

Dominion proposes to permanently separate the Pond D Toe Drainage from Outfall 010 and has developed a conceptual plan for moving forward with this separation. The conceptual plan is shown on Figures 3 and 4. It consists of a new culvert / outfall exclusively for stormwater. The Permanent Solution will allow the Station to tie the groundwater flow into the Prince William County Service Authority (PWCSA) sanitary sewer system or permanently divert the flow to internal Outfall 503 after treatment, as required. Once the Permanent Solution is installed, a revised demonstration plan will be submitted to the VADEQ for approval in accordance with VPDES Permit No. VA0002071 Part 1. F. 23.

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The mechanical separation of the flows will provide complete separation of the groundwater contributions during wet and dry weather conditions. Initially following installation there will be daily monitoring and visual inspections to ensure the system is functioning as designed. Prior to the installation of the Permanent Solution, the stormwater discharges will be monitored at a minimum frequency of once every five days, or no more than 48 hours after a runoff-producing rain event to confirm there are no groundwater contributions.

5.3 Schedule

Dominion would like to implement the Permanent Solution as soon as possible following this Notice of Planned Change. Until approval is granted from the PWCSA to discharge to the sanitary sewer system, or when the final treatment system for the Internal Outfall 503 (Final Configuration) is approved by the Virginia Department of Environmental Quality (VADEQ), Dominion will divert Pond D Toe Drainage to Ash Pond D.

5.4 As-Built Drawings

As-Built Drawings will be prepared and provided to the VADEQ to confirm that all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

FIGURES



DRAWING



APPENDIX A

Original Design: Pond D Toe Drain Plan View



APPENDIX B

Original Design: Toe Drain Manhole Detail



APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail



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March 2016



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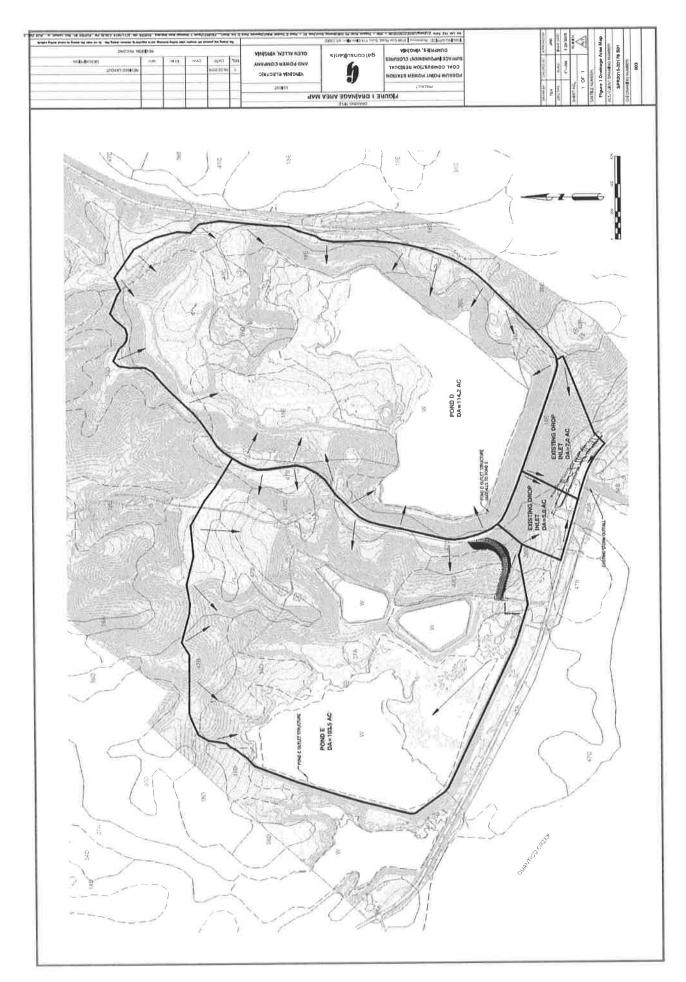
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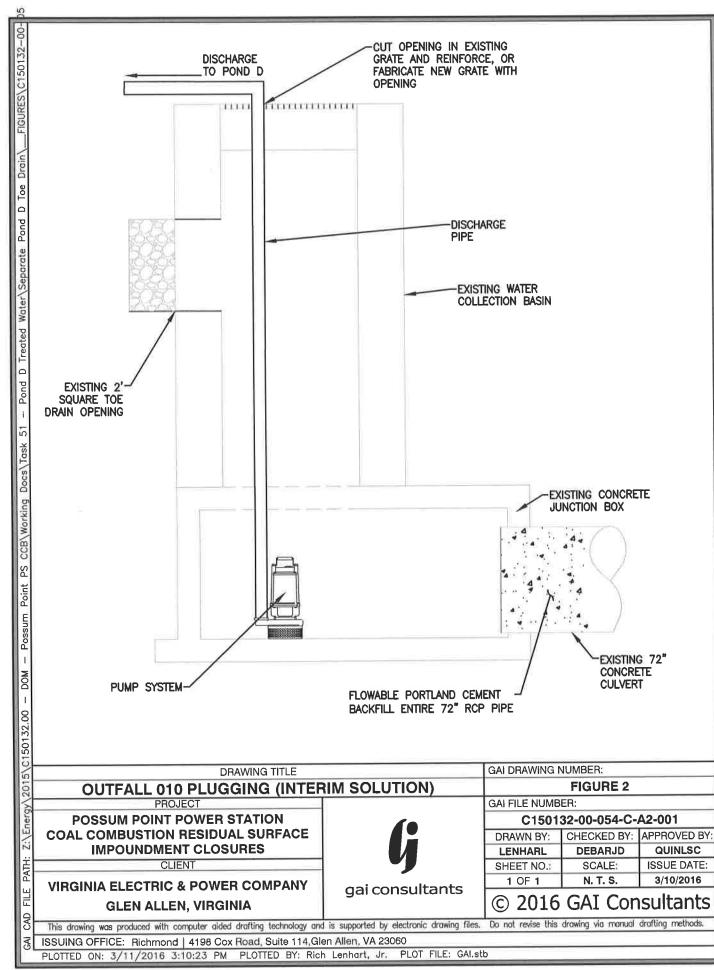
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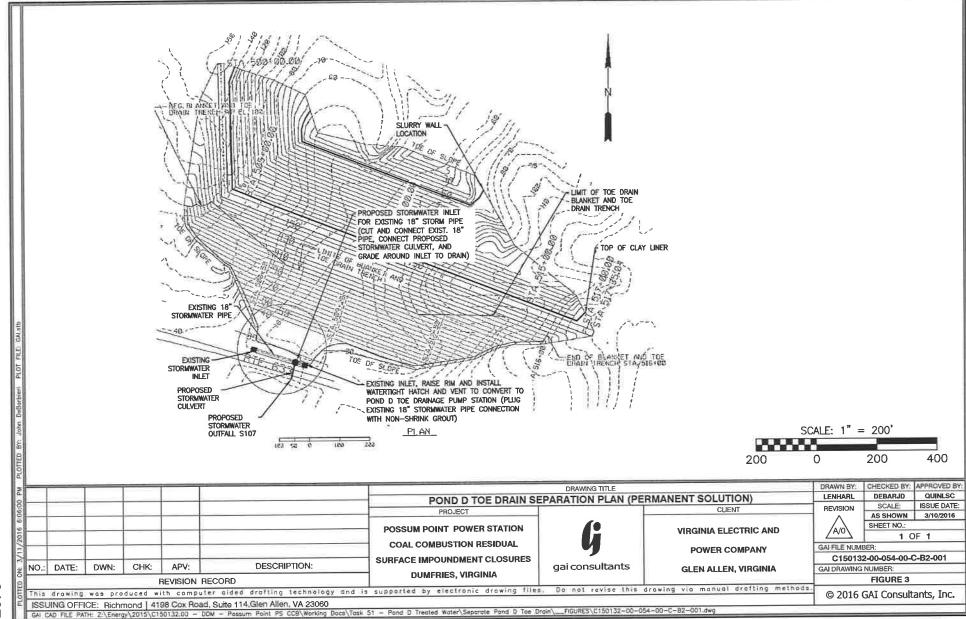


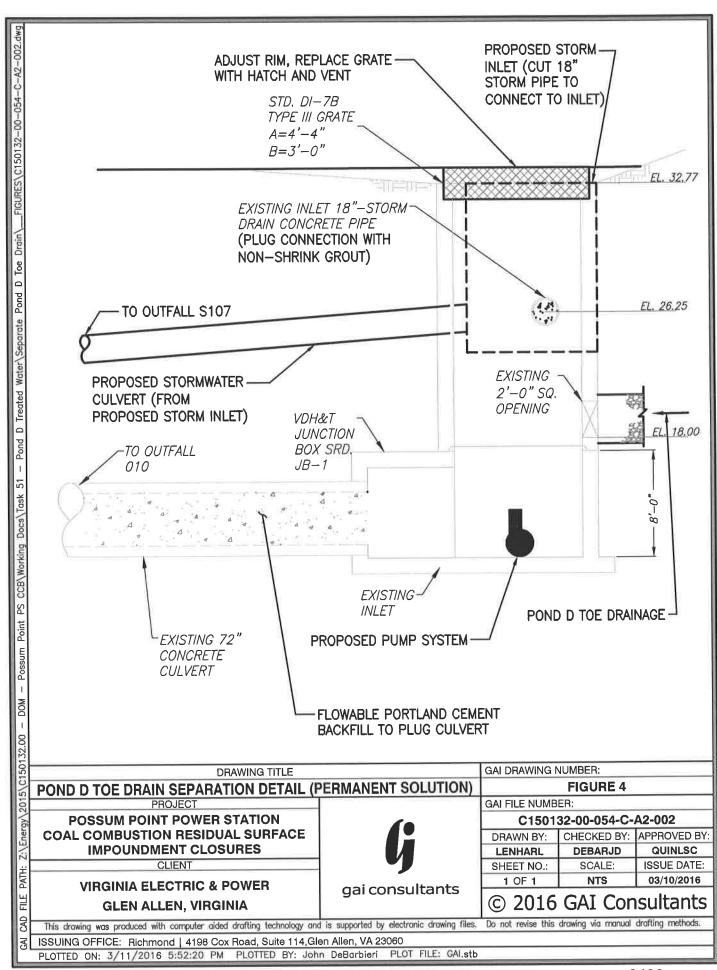
FIGURES





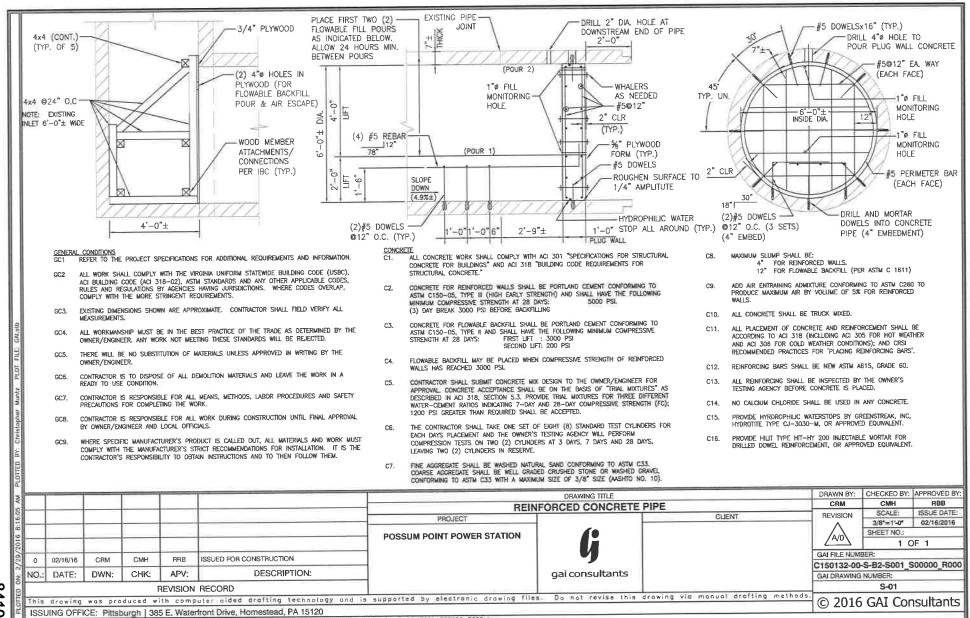






DRAWING



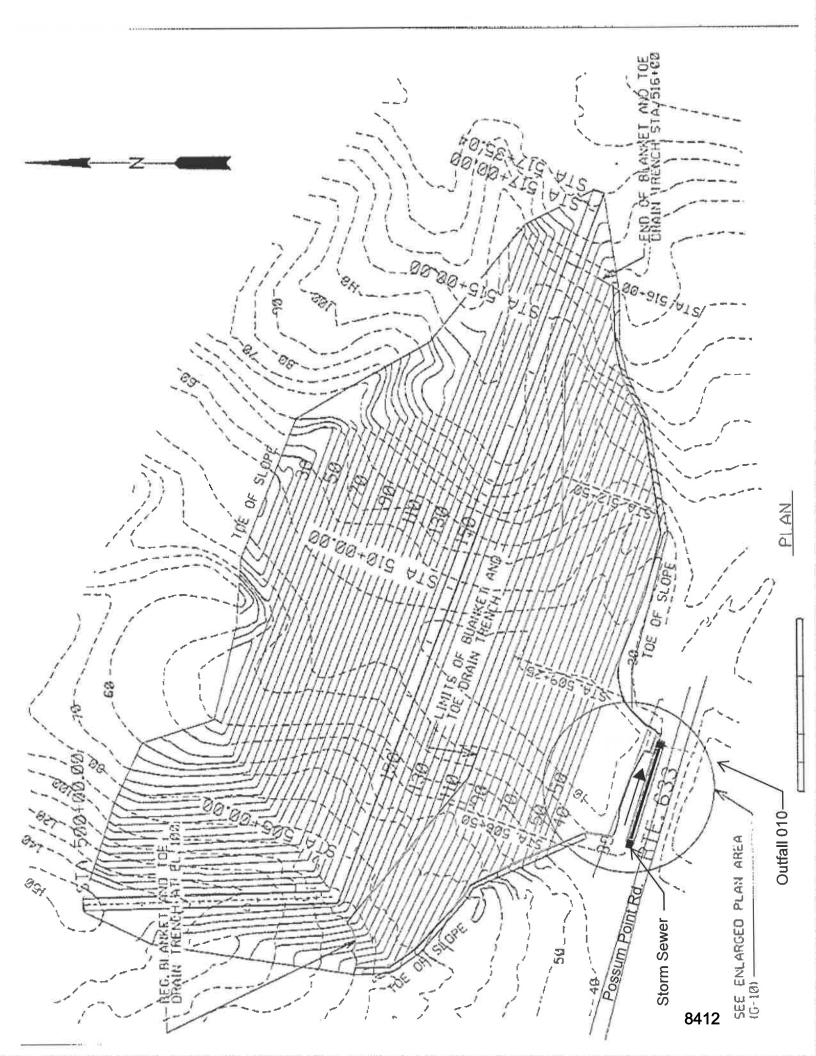


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APPENDIX A

Original Design: Pond D Toe Drain Plan View

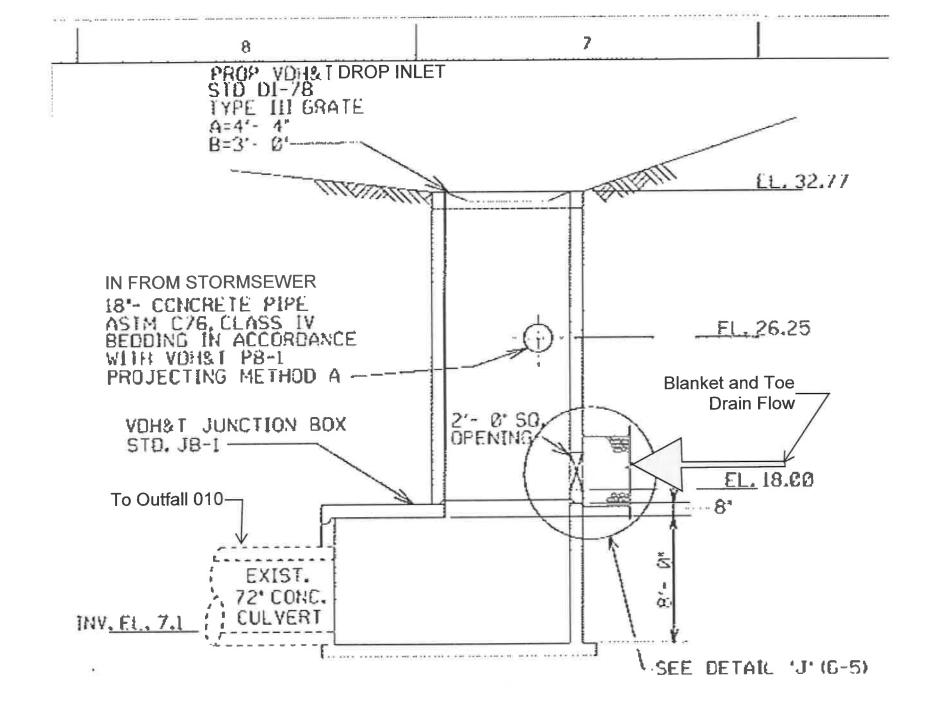




APPENDIX B

Original Design: Toe Drain Manhole Detail



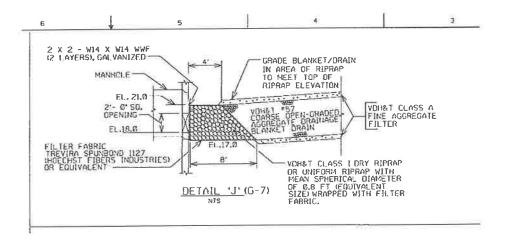


SECTION H - H (H-9)

APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail





Demonstration Plan for Outfall 010 Groundwater Separation

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> GAI Project Number: C150132.00, Task 051 March 2016



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<u>Historically, t</u>The existing-discharge at Outfall 010 <u>hasis been</u> comprised of stormwater runoff and groundwater flows from the Pond D impoundment area and toe drain. Outfall 010 dischargeds on the south side of Possum Point Road to an unnamed tributary of Quantico Creek via a <u>Dominion owned</u> 72-inch reinforced concrete culvert.

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4.0 Interim Solution

4.1 Description

The Interim Solution consists of plugging the 72-inch reinforced concrete pipe (RCP) culvert and diverting the stormwater, groundwater, and Pond D Toe Drainage contributions to Ash Pond D for eventual discharge through Outfall 503 in compliance with the Station's VPDES Permit (Refer to Figure 2 and the attached Drawing S-01 Reinforced Concrete Pipe). The 72-inch culvert has been cleaned of sediment with a cleanout nozzle and the water / sediment were removed concurrently by vac truck to an offsite facility for treatment and disposal. A temporary lumber and plywood bulkhead was constructed on the upstream end of the culvert at the existing inlet north of Possum Point Road. Plywood forms, held in place with steel reinforcement, were constructed for a one-foot-wide, cast-in-place concrete plug wall at the downstream end of the culvert. A sump pump was installed to collect Outfall 010 contributions and divert them to Ash Pond D. After the plug wall cured, flowable Portland Cement backfill was applied in lifts to fill the culvert.

A generator powered pump system was installed in the existing inlet north of Possum Point Road for all the collected water (stormwater, groundwater, and Ash Pond D Toe Drainage) to be diverted to Pond D. Installation of the concrete plug was completed and the discharge from Outfall 010 ceased on XXXXX, 2016.

4.2 Wet Weather and Dry Weather Considerations

The Interim Solution will operate during wet and dry weather conditions and all flow will be transferred to Pond D until the permanent solution is constructed that will mechanically separate the Pond D Toe Drainage from the stormwater.

4.3 Schedule

gai consultants

Comment [jac1]: Does Dominlon own the 72 inch pipe or is it VDH&T owned? Needs verification.

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Dominion has submitted a Notice of Planned Change in February 2016 to implement the Interim Solution. The Interim Solution will remain in service until the Permanent Solution can be implemented.

Comment [KR2]: I don't think we need to include this sentence. We provided email description and phone notifications.

5.0 Permanent Solution

5.1 Description

Dominion proposes to permanently separate the Pond D Toe Drainage from Outfall 010 and has developed a conceptual plan for moving forward with this separation. The conceptual plan is shown on Figures 3 and 4. It consists of a new culvert / outfall exclusively for stormwater. The Permanent Solution will allow the Station to tie the groundwater (toe drain) flow into the Prince William County Service Authority (PWCSA) sanitary sewer system or permanently divert the flow to internal Outfall 503 after treatment, as required in its final configuration. Once the Permanent Solution is installed we will begin monitoring Outfall S107 in accordance with Part I.A.15 of the permit, a revised demonstration plan will be submitted to the VADEQ for approval in accordance with VPDES Permit No. VA0002071 Part 1. F. 23Dominion will begin.

5.2 Wet Weather and Dry Weather Considerations

The mechanical separation of the flows will provide complete separation of the groundwater contributions during wet and dry weather conditions. <u>During the initial period Initially</u> following installation there will be daily monitoring and visual inspections to ensure the system is functioning as designed and monitoring of the discharge will commence in accordance with Part I.A.15 of the permit. Prior to the installation of the Permanent Solution, the stormwater discharges will be monitored at a minimum frequency of once every five days, or no more than 48 hours after a runoff-producing rain event to confirm there are no groundwater contributions.

5.3 Schedule

Dominion would like to implement the Permanent Solution as soon as possible following <u>DEQ approval of this Notice of Planned Change Demonstration Plan</u>. Until approval is granted from the PWCSA to discharge to the sanitary sewer system, or when the final treatment system for the Internal Outfall 503 (Final Configuration) is approved by the Virginia Department of Environmental Quality (VADEQ), Dominion will <u>continue to divert Pond D Toe Drainage to Outfall 503 as allowed by the VPDES permit.</u>

Ash Pond D.

5.45.3As-Built Drawings

As-Built Drawings will be prepared and provided to the VADEQ to confirm that all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

Comment [KR3]: I think that this plan demonstrates that we have already successfully separated the toe drain from Outfall 010. The next step is to reintroduce the stormwater portion back to a new Outfall S107 and begin monitoring.

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FIGURES



C150132.00, Task 051 / March 2016

DRAWING



C150132.00, Task 051 / March 2016

APPENDIX A

Original Design: Pond D Toe Drain Plan View



APPENDIX B

Original Design: Toe Drain Manhole Detail



C150132.00, Task 051 / March 2016

DRAFT Demonstration Plan for Outfall 010 Groundwater Separation
Virginia Electric and Power Company
Possum Point Power Station, Coal Combustion Residual Surface Impoundment Closures, Dumfries, Virginia

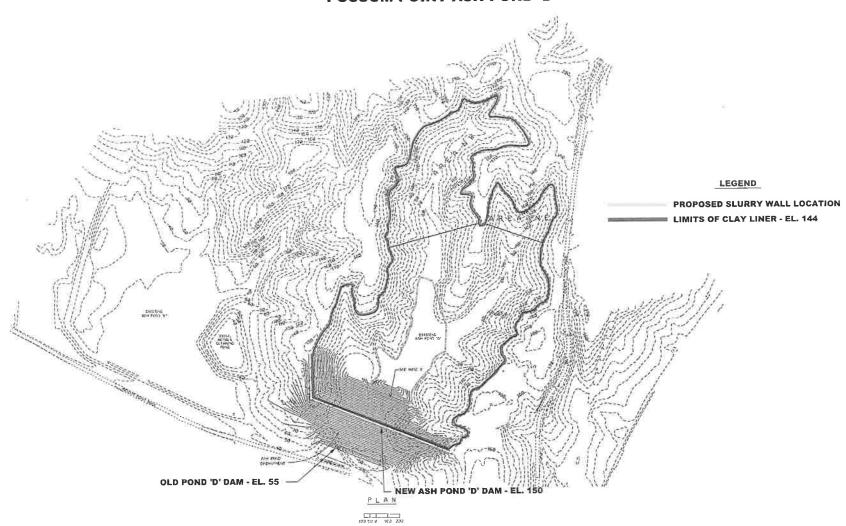
APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail



C150132.00, Task 051 / March 2016

1988 GROUND WATER PROTECTION PLAN POSSUM POINT ASH POND 'D'





Date Prepared: Dec. 8, 2015

Prepared By:

Mike Winters, PE

ANNUAL INSPECTION REPORT FOR VIRGINIA REGULATED IMPOUNDING STRUCTURES

Reference: Impounding Structures Regulations, 4VAC 50-20-10 et seq., including 4VAC 50-20-105, Virginia Soil and Water Conservation Board

Owner's Information					
Name of Dam:		t Power Station - Ash Pond D Dam	Inventory Number:	15320	
Owner's Name:		ttn: Mike Winters, P.E.	Location-County/City:	Prince William County	
Owner's Address:		on Boulevard		(e-signature)	
Owner's Address:	Glen Allen V		Hazard Classification:	Significant	
Name of reservoir:		t Ash Pond D			
Purpose of reservoir:	impounds co				
Telephone No.:	(mobile)	804-347-9451	(Business) 804-273-23	376	
Other means of commu	nication:	michael.j.winters@dom.com			
Owner's Engineer		D :: D O ::	E ' ' M' L 1397	4 DE	
Name of Engineering F			Engineering – Michael Wi	nters, PE	
Professional Engineer \					
Mailing Address:		ion Boulevard			
	Glen Allen	VA 23060			
Telephone No.:	(Business)	(office) 804-273-2376; (mobile) 804-347-9	0/451		
relephone ivo	(Dusiness)	(office) 804-273-2370, (moone) 804-347-2	7431		
Directions: Make note	of all pertine	nt conditions and changes since the last in	nspection, or, if this is the	first inspection, since	
the filing of a design re			nopection, or, ir this is the	more more on, since	
0 0			Date of This Inspection	10/02/2015	
			Date of Last Inspection	4/10/2014	
			•		
1. EMBANKMENT					
a. Any alteration m	ade to the emb	ankment? No			
,					
b. Erosion on emba	nkment? No	one observed			
	-	=======================================			
c. Settlement, misal	lignment or cra	cks in embankment? No cracking or mis	salignment. Surficial sloug	h observed on the	
upstream slop	-	3	3		
		te and location (describe any turbidity and	observed color within the 1	low):	
		be drain flow clear and consistent with histo		, i	
###					
2. UPSTREAM SLOI	PE				
a. Woody vegetatio	n discovered?	No			
b. Rodent burrows		No			
c. Remedial work p	erformed?	No			
1		*			
3. DECANT STRUCT	TURE TOWE	R (SEE PHOTOS)			
a. Deterioration of		No – concrete in excellent conditi	on		
b. Exposure of reba					
c. Is there a need to					
d. Any problems w					
e. Was the drawdov			low lowest outlet.		
(DCD100 009) (00)	•	Page 1 of 4			

(DCR199-098) (09/11)

Page I of 4

4.	ABUTMENT CONTACTS (SEE PHOTOS) a. Any seepage? If so, estimate the flow rate and describe the location of the seep or damp areas (describe any turbidity and observed color within the flow): None at contacts. Historical wet spots present beyond abutment contacts from perched groundwater on subsurface clay layer. Discovered during dam design exploration and prior to construction. No change this inspection.
5.	a. Obstructions to flow? If so, describe plans to correct: Trees and brush. The reservoir can store the design storm Therefore, there are no plans to remove trees and brush from the emergency spillway at this time. b. Rodent burrows discovered? None observed. c. Any deterioration in the approach or discharge channel? None observed.
6.	CONCRETE EMERGENCY SPILLWAY a. Deterioration of concrete? b. Exposed steel reinforcement? c. Any leakage below concrete spillway? d. Obstructions to flow? If so, lists plans to correct:
7.	a. Woody vegetation discovered? b. Rodent burrows discovered? c. Are seepage drains flowing? d. Any seepage or wet areas? Wet on bench at El 150 ft., 15-feet long. The wet area is above the upstream water surface. Therefore, the source is either slope runoff or shallow seepage from the bench above.
8.	DECANT TOWER OUTLET PIPE (SEE PHOTOS) a. Any water flowing outside of discharge pipe through the Impounding Structure? b. Describe any deflection or damage to the pipe: No None observed
9.	STILLING BASIN (@ U/S END OF DITCH TO POND E – SEE PHOTOS) a. Deterioration of concrete structures? No b. Exposure of rebar reinforcement? No c. Deterioration of the basin slopes? N/A d. Repairs made? N/A e. Any obstruction to flow? No
10	a. Gate malfunctions or repairs? b. Corrosion or damage? No c. Were any gates operated? If so, how often and to what extreme? No. Reservoir level about 6 feet below lowest outlet.
11	a. New developments upstream of dam? No b. Slides or erosion of lake banks around the rim? No c. General comments to include silt, algae or other influence factors: No comments

12. INSTRUMENTS a. List all instruments Piezometers and observation wells	
b. Any readings of instruments? none	
c. Any installation of new instruments? No	
a. New development in downstream inundation zone? No b. Note the maximum storm water discharge or peak elevation during the previous year. N/A c. Was general maintenance performed on dam? If so, when? Mowed bi-annually. d. List actions that need to be accomplished before the next inspection:	
14. OVERALL CONDITION ASSESSMENT OF IMPOUNDING STRUCTURE AND APPURTENANCES	
(Check one) XSATISFACTORY FAIR POOR UNSATISFACTORY N	NOT RATED
1. SATISFACTORY No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all load (static, hydrologic, seismic) in accordance with the applicable regulatory criteria or tolerable risk guidelines. 2. FAIR No existing dam safety deficiencies are recognized for normal loading conditions. Rare or extreme hydrologic and events may result in a dam safety deficiency. Risk may be in the range to take further action. 3. POOR A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is nec may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety defurther investigations and studies are necessary. 4. UNSATISFACTORY A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution 5. NOT RATED The dam has not been inspected, is not under state jurisdiction, or has been inspected but, for whatever reason, has	l/or seismic eessary. POOR eficiency.
General Comments: • Dam can store the PMF without discharge.	
Recommendations:	

CERTIFICATION BY OWNER'S ENGINEER (required only when an inspection by an engineer is required)

I hereby certify that the information provided in this report has been example professional judgment.	nined by me and found to be true and correct in my
Signed: Michael Wir Professional Engineer's Signature Print Nam	
This 8th day of December , 20 15 .	
Engineer's Virginia Seal:	Michael John Winters No. 033623 Zerick Stonal English
CERTIFICATION E	BY OWNER
I hereby certify that the information provided in this report has been exar	nined by me
Thereby certify that the information provided in this seport has been example.	inned by his.
Signed: Mcley Mulen	Michael Winters
Owner's Signature	Print Name
This 8 th day of December , 20 15 .	

Mail the executed form to the appropriate
Department of Conservation and Recreation
Division of Dam Safety and Floodplain Management
Regional Engineer

Subject: Dominion Possum Point Power Station Hydrologic Analysis for Inlets below Pond D Embankment

01/14/2016 Project #: C150132.00

BerkeME Date: Chkd By: SchelAB Date: 02/2/2016

PURPOSE:

This calculation will estimate the 1- through 100-year peak flow rates and runoff volumes to the Eastern and Western Inlets at the Bottom of the Pond D Embankment and the 72-inch culvert.

METHOD:

The Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2013 will be used to estimate a peak flow rate and runoff volume for each drainage area for multiple storm events. The two inlet flows will be combined to estimate peak flow rates to the existing 72-inch culvert under Possum Point Road for the design events.

INPUT DATA:

Rainfall Data (From NOAA Atlas 14, Volume 2, Version 3-Dumfries, VA):

1-yr, 24-hr event	=	2.57 in
2-yr, 24-hr event	=	3.12 in
5-yr, 24-hr event	=	4.04 in
10-yr, 24-hr event	=	4.84 in
25-yr, 24-hr event	=	6.06 in
100-yr, 24-hr event	=	8.35 in

Runoff Curve Numbers (from Table 2-2a, 2-2b, and 2-2c from TR-55 Manual):

Meadow	=	58
Gravel	=	85
Impervious/Roads	= 1	98

Land use was determined from the USDA mapping and aerial imagery. Soil type was determined to be Type B from the USDA Soil Map. Refer to the attached Drainage Area Map for aerial imagery and soil type boundaries.

HYDROLOGIC ANALYSIS:

The following pages contain the hydrologic analysis and include:

- a drainage area map
- precipitation data
- composite curve number determination (within the hydraflow software), and
- hydraflow input/output.

A composite curve number for the watershed was equal to 60. Due to the small size and steep nature of the embankment, a 5-minute time of concertation was assumed for each watershed.

gai consultants

Subject: <u>Dominion Possum Point Power Station</u>

Hydrologic Analysis for Inlets below Pond D Embankment

By: BerkeME

Date:

01/14/2016 Project #: C150132.00

gai consultants

Chkd By: SchelAB

Date: 02/2/2016

SUMMARY OF RESULTS:

The following tables summarize peak flow rates and runoff volumes estimated at each inlet and the culvert.

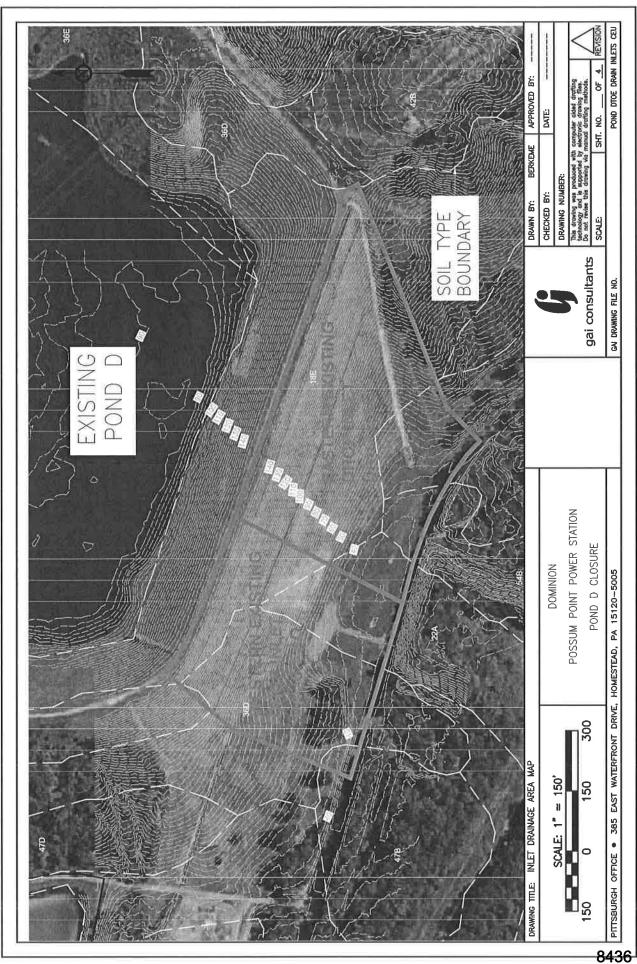
	Estimat	ed Flow Rate	e (cfs)	Estimated Runoff Volume (cf)			
Storm Event	Western Inlet	Eastern Inlet	72" Culvert	Western Inlet	Eastern Inlet	72" Culvert	
1-year	0.8	1.1	2.0	3,723	5,201	8,924	
2-year	2.6	3.7	6.3	7,266	10,149	17,415	
5-year	6.7	9.4	16.2	15,038	21,007	36,045	
10-year	11.1	15.5	26.6	23,257	32,488	55,745	
25-year	18.6	26.0	44.6	37,731	52,705	90,436	
100-year	34.5	48.2	82.6	69,231	96,709	165,940	

Subject: Dominion Possum Point Power Station
Hydrologic Analysis for Inlets below Pond D Embankment

By: BerkeME Date: 01/14/2016 Project #: C150132.00 gai consultants

Chkd By: SchelAB Date: 02/2/2016

DRAINAGE AREA MAP



Subject:	Dominion Possu	ım Point	Power Station			Ui
	Hydrologic Ana	lysis for lı	nlets below Por	nd D Embar	kment	
Ву:	BerkeME	Date:	01/14/2016	Project #:	C150132.00	gal consultants
Chkd By:	SchelAB	Date:	02/2/2016			

PRECIPITATION DATA



NOAA Atlas 14, Volume 2, Version 3 Location name: Dumfries, Virginia, US* Latitude: 38.5352°, Longitude: -77.2816° Elevation: 30 ft* * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley NOAA, National Weather Service, Silver Spring, Maryland PF tabular | PF graphical | Maps & aerials

PF tabular

Downstian				Avera	ge recurrenc	e interval (y	ears)			
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	0.357 (0.323-0.393)	0.428 (0.387-0.472)	0.509 (0.460-0.561)	0.568 (0.512-0.626)	0.643 (0.576-0.709)	0.699 (0.624-0.771)	0.755 (0.670-0.834)	0.810 (0.713-0.896)	0.880 (0.766-0.979)	0.934 (0.808-1.0
10-min	0.570 (0.516-0.629)	0.685 (0.620-0.755)	0.815 (0.737-0.898)	0.909 (0.820-1.00)	1.03 (0.918-1.13)	1,11 (0.993-1.23)	1.20 (1.06-1.33)	1.28 (1.13-1.42)	1.39 (1.21–1.55)	1.47 (1.27-1.65
15-min	0.713 (0.645-0.786)	0.861 (0.779-0.949)	1.03 (0.932-1.14)	1.15 (1.04-1.27)	1.30 (1.16-1.43)	1.41 (1.26-1.56)	1.52 (1.35-1.68)	1.62 (1.43-1.79)	1.75 (1.53–1.95)	1.85 (1.60-2.06
30-min	0.978 (0.884-1.08)	1.19 (1.08-1.31)	1.47 (1.32-1.62)	1.67 (1.50-1.84)	1.93 (1.72-2.12)	2.12 (1.89-2.34)	2.32 (2.06-2.57)	2.52 (2.22-2.79)	2.79 (2.43-3.10)	2.99 (2.59-3.34
60-min	1.22 (1.10-1.34)	1.49 (1.35-1.64)	1.88 (1.70-2.07)	2.17 (1.96-2.39)	2.56 (2.30-2.83)	2.88 (2.57-3.17)	3.20 (2.84-3.53)	3.54 (3.11-3.91)	4.00 (3.48-4.45)	4.37 (3.78-4.88
2-hr	1.42 (1.28-1.58)	1.73 (1.56-1.92)	2.20 (1.98-2.43)	2.56 (2.30-2.83)	3.07 (2.74-3.39)	3.49 (3.10-3.85)	3.92 (3.46-4.34)	4.39 (3.84-4.86)	5.04 (4.36-5.61)	5.57 (4.77-6.23
3-hr	1.53 (1.38-1.72)	1.87 (1.68-2.09)	2.37 (2.12-2.64)	2.77 (2.47-3.08)	3.33 (2.96-3.71)	3.80 (3.35-4.23)	4.30 (3.76-4.78)	4.82 (4.18-5.38)	5.58 (4.77-6.25)	6.20 (5.24–6.9
6-hr	1.89 (1.70-2.12)	2.29 (2.06-2.56)	2.89 (2.59-3.23)	3.38 (3.02-3.78)	4.11 (3.64-4.59)	4.72 (4.15-5.28)	5.39 (4.69-6.02)	6.11 (5.26-6.84)	7.17 (6.08-8.07)	8.06 (6.73-9.1
12-hr	2.29 (2.05–2.58)	2.76 (2.47-3.11)	3.51 (3.13-3.95)	4.14 (3.68–4.65)	5.10 (4.49-5.72)	5.94 (5.17-6.66)	6.87 (5.91–7.70)	7.90 (6.71–8.88)	9.46 (7.88-10.7)	10.8 (8.86-12.
24-hr	2.57 (2.34–2.89)	3.12 (2.83-3.50)	4.04 (3.66-4.52)	4.84 (4.37-5.40)	6.06 (5.43-6.74)	7.14 (6.35-7.90)	8.35 (7.37-9.21)	9.73 (8.50-10.7)	11.8 (10.2–13.0)	13.7 (11.6-15.
2-day	2.99 (2.70-3.33)	3.63 (3.29-4.04)	4.68 (4.24–5.21)	5.59 (5.04-6.21)	6.96 (6.24-7.70)	8.16 (7.27-9.00)	9.49 (8.38-10.5)	11.0 (9.62-12.1)	13.3 (11.4-14.6)	15.2 (13.0–16.
3-day	3.17 (2.88-3.53)	3.84 (3.49-4.28)	4.95 (4.48-5.50)	5.90 (5.32-6.54)	7.32 (6.56-8.09)	8.56 (7.63-9.43)	9.93 (8.78-10.9)	11.5 (10.1–12.6)	13.8 (11.9–15.1)	15.8 (13.5-17.
4-day	3.35 (3.05-3.72)	4.06 (3.69-4.52)	5.21 (4.73-5.79)	6.20 (5.61-6.87)	7.67 (6.89-8.48)	8.95 (8.00-9.87)	10.4 (9.19–11.4)	11.9 (10,5–13.1)	14.3 (12.4–15.7)	16.3 (14.0–17.
7-day	3.90 (3.57-4.28)	4.70 (4.30-5.16)	5.95 (5.44-6.53)	7.00 (6.39-7.69)	8.58 (7.80-9.40)	9.93 (8.97-10.9)	11.4 (10.2–12,5)	13.1 (11.6–14.2)	15.5 (13.6–16.9)	17.6 (15.2–19.
10-day	4.46 (4.11-4.87)	5.36 (4.93–5.86)	6.69 (6.15-7.30)	7.79 (7.15-8.49)	9.39 (8.57-10.2)	10.7 (9.76–11.7)	12.2 (11.0-13.2)	13.7 (12.3-14.9)	16.0 (14.2-17.3)	17.8 (15.7–19.
20-day	6.01 (5.59-6.49)	7.16 (6.65–7.73)	8.65 (8.04–9.33)	9.86 (9.15-10.6)	11.6 (10.7–12.4)	12.9 (11.9–13.9)	14.3 (13.2–15.4)	15.8 (14.5–17.0)	17.9 (16.2-19.2)	19.5 (17.6–21.
30-day	7.39 (6.89–7.92)	8.74 (8.17-9.38)	10.4 (9.71-11.2)	11.7 (10.9–12.6)	13.6 (12.6-14.5)	15.0 (13.9-16.0)	16.5 (15.2–17.6)	18.0 (16.6-19.2)	20.0 (18.3-21.4)	21.6 (19.7-23.
45-day	9.29 (8.72-9.86)	11.0 (10.3-11.6)	12.8 (12.0-13.6)	14.3 (13.4-15.1)	16.1 (15.1-17.1)	17.6 (16.4-18.6)	19.0 (17.7-20.1)	20.4 (18.9–21.6)	22.1 (20.5–23.5)	23.5 (21.7-25.
60-day	11.0 (10.4-11.7)	13.0 (12.2-13.7)	15.0 (14.1-15.9)	16.5 (15.6-17.4)	18.5 (17.4–19.5)	19.9 (18.7-21.0)	21.3 (19.9-22.5)	22.6 (21.1-23.9)	24.2 (22.6-25.7)	25.4 (23.6–26.

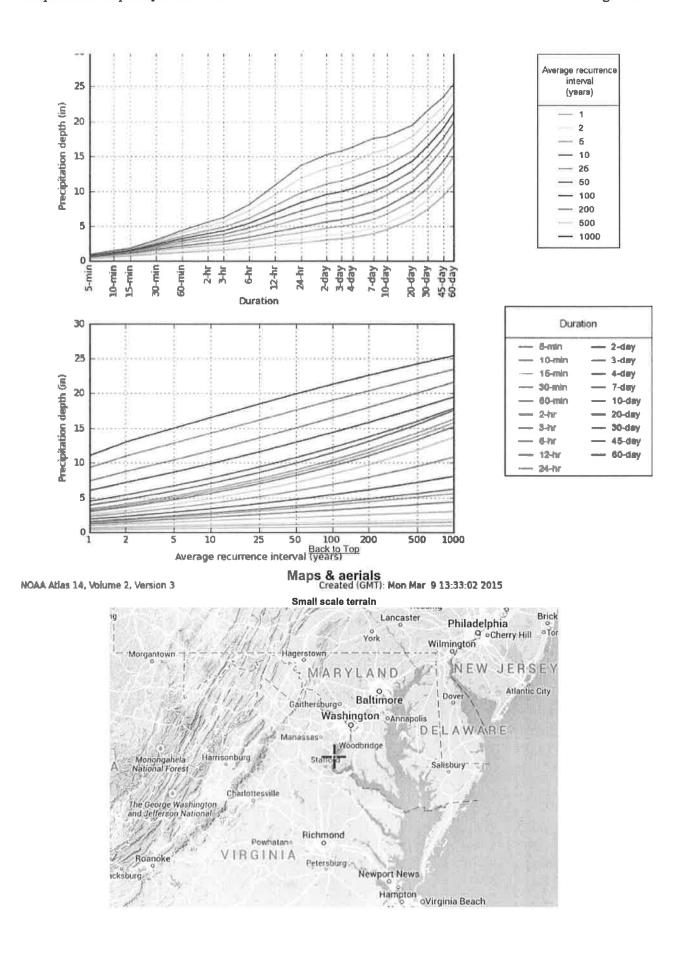
Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS)

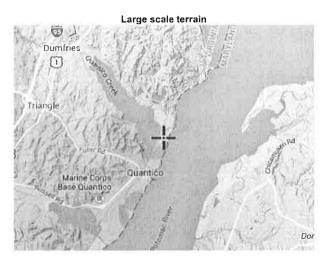
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

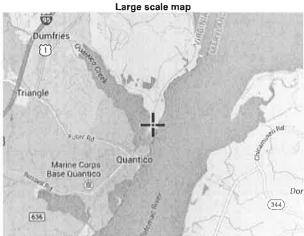
Please refer to NOAA Atlas 14 document for more information.

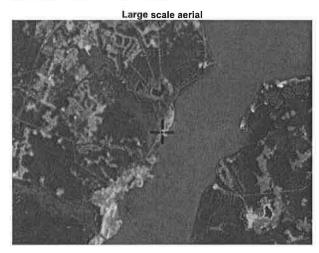
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PF graphical









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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Hydrologic Development
1325 East West Highway
Silver Spring, MD 20910

Subject: Dominion Possum Point Power Station
Hydrologic Analysis for Inlets below Pond D Embankment

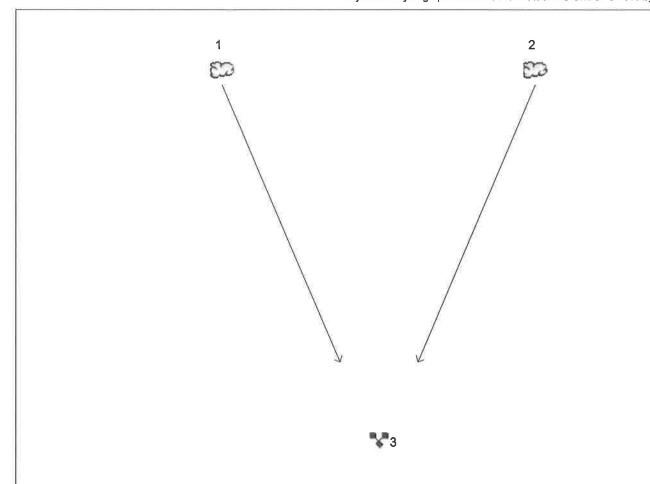
By: BerkeME Date: 01/14/2016 Project #: C150132.00 gal consultants

Chkd By: SchelAB Date: 02/2/2016

HYDRAFLOW INPUT/OUTPUT

Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10



Project: \\gaiconsultants.local\\BUProj\Energy\2015\C150132.00 - DOM - Possum Point PS @@&\Mgr\0@g Doc\EnglishGINEERING\H & |

8442

Hydrograph Summary Report Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

lyd. Io.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.822	1	721	3,723	******			Western Inlet
2	SCS Runoff	1.148	1	721	5,201		· ·	7,000,00	Eastern Inlet
3	Combine	1.970	1	721	8,924	1, 2	*******		72 Inch Culvert

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Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

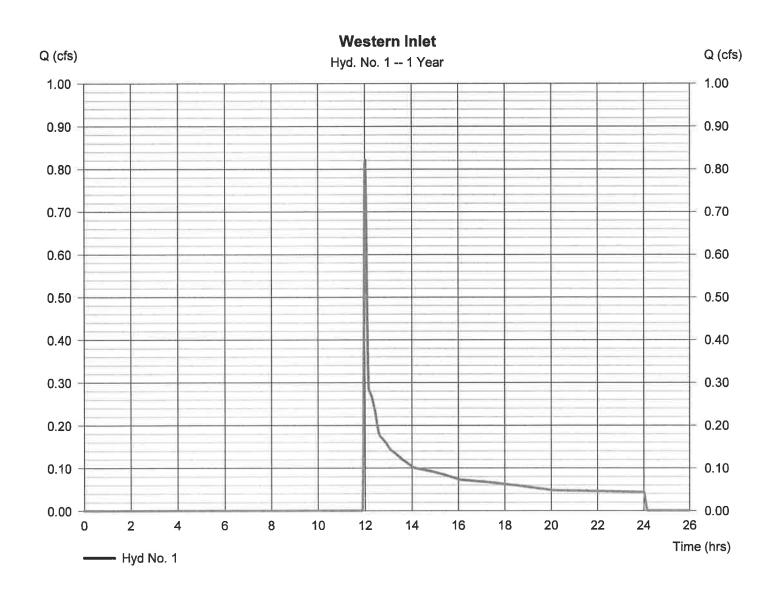
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type = SCS Runoff Peak discharge = 0.822 cfs= 1 yrs $= 12.02 \, hrs$ Storm frequency Time to peak Hyd. volume = 3,723 cuftTime interval = 1 min = 5.140 ac Drainage area Curve number = 60* Hydraulic length = 0 ftBasin Slope = 0.0 %Tc method = User Time of conc. (Tc) $= 5.00 \, \text{min}$ Total precip. = 2.57 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(4.790 \times 58) + (0.210 \times 85) + (0.140 \times 98)] / 5.140$



Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

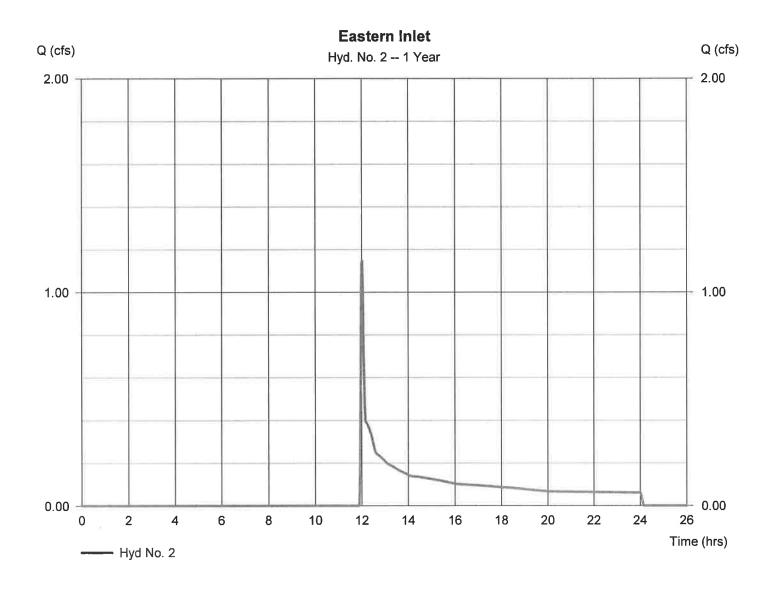
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type = SCS Runoff Peak discharge = 1.148 cfsStorm frequency Time to peak = 12.02 hrs= 1 yrsTime interval = 1 min Hyd. volume = 5,201 cuftCurve number = 60* = 7.180 acDrainage area = 0.0 % Hydraulic length = 0 ftBasin Slope Time of conc. (Tc) $= 5.00 \, \text{min}$ = User Tc method Distribution = Type II Total precip. = 2.57 inShape factor = 484 Storm duration = 24 hrs

^{*} Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



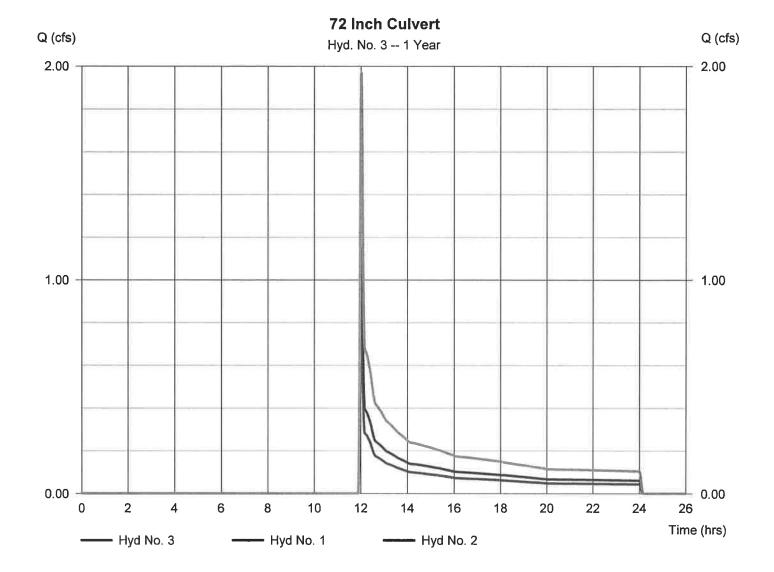
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Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type = Combine Storm frequency = 1 yrs Time interval = 1 min Inflow hyds. = 1, 2 Peak discharge = 1.970 cfs
Time to peak = 12.02 hrs
Hyd. volume = 8,924 cuft
Contrib. drain. area = 12.320 ac



Hydrograph Summary Report Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

(origin) (cfs) (min) (min) (cuft) (ft) (cuft) 1 SCS Runoff 2.622 1 719 7,266			•			•	Hydraflow	nyorograpus Ex	tension for Auto	CAD® Civil 3D® 2013 by Autodesk, Inc. V1
2 SCS Runoff 3.663 1 719 10,149 Eastern Inlet	Hyd. No.	type	flow	interval	Peak	volume		elevation	strge used	
	1	SCS Runoff	2.622	1	719	7,266	200.000		2342	Western Inlet
3 Combine 6.266 1 719 17,415 1,2 72 Inch Culvert	2	SCS Runoff	3.663	1	719	10,149				Eastern Inlet
	3	Combine	6.286	1	719	17,415	1, 2		****	72 Inch Culvert
							4			

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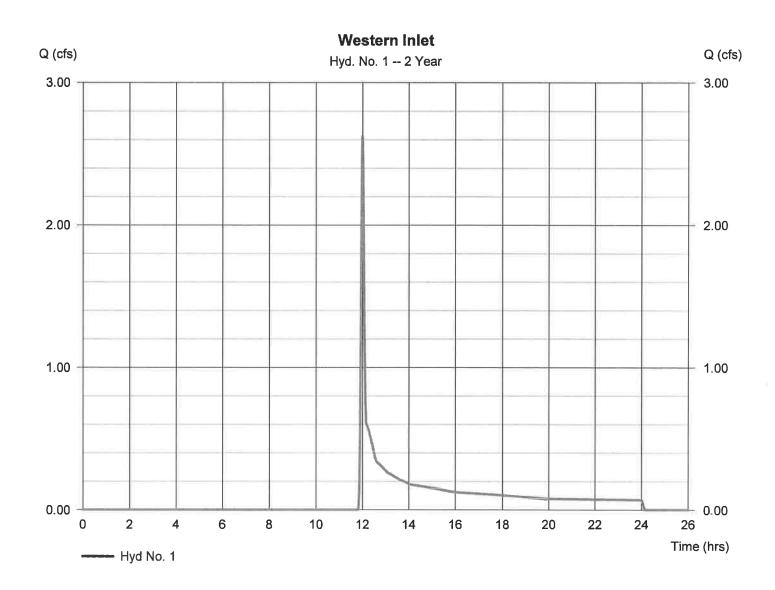
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type = SCS Runoff Peak discharge = 2.622 cfs= 2 yrs Storm frequency $= 11.98 \, hrs$ Time to peak Time interval = 1 min Hyd. volume = 7,266 cuftDrainage area Curve number = 5.140 ac= 60*Basin Slope = 0.0 % Hydraulic length = 0 ftTime of conc. (Tc) Tc method = User $= 5.00 \, \text{min}$ Total precip. = 3.12 inDistribution = Type II Storm duration Shape factor = 24 hrs = 484

^{*} Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



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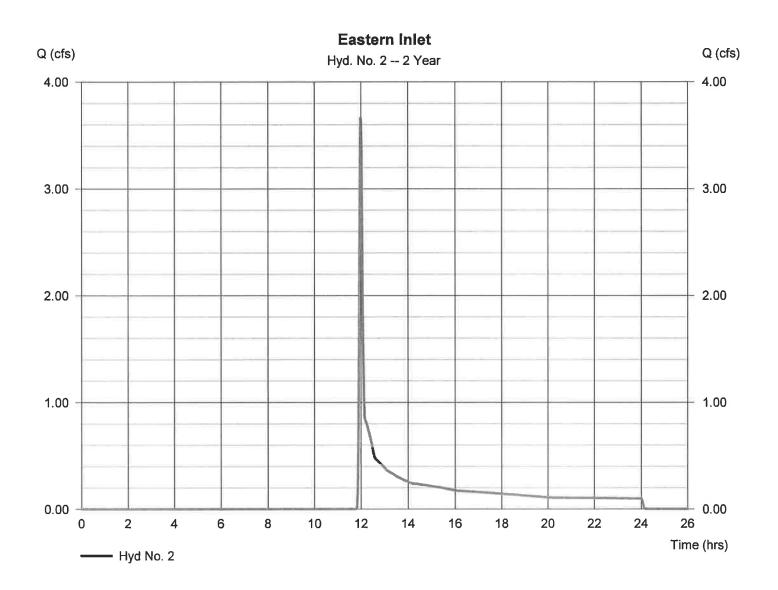
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

= SCS Runoff Hydrograph type Peak discharge = 3.663 cfsStorm frequency = 2 yrsTime to peak = 11.98 hrs Time interval = 1 min Hyd. volume = 10,149 cuft Drainage area = 7.180 acCurve number = 60* Basin Slope = 0.0 %Hydraulic length = 0 ftTime of conc. (Tc) Tc method = User $= 5.00 \, \text{min}$ Distribution = Type II Total precip. = 3.12 in= 484 Storm duration = 24 hrs Shape factor

^{*} Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



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Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type Storm frequency Time interval

Inflow hyds.

= Combine

= 2 yrs

= 1 min = 1, 2 Peak discharge

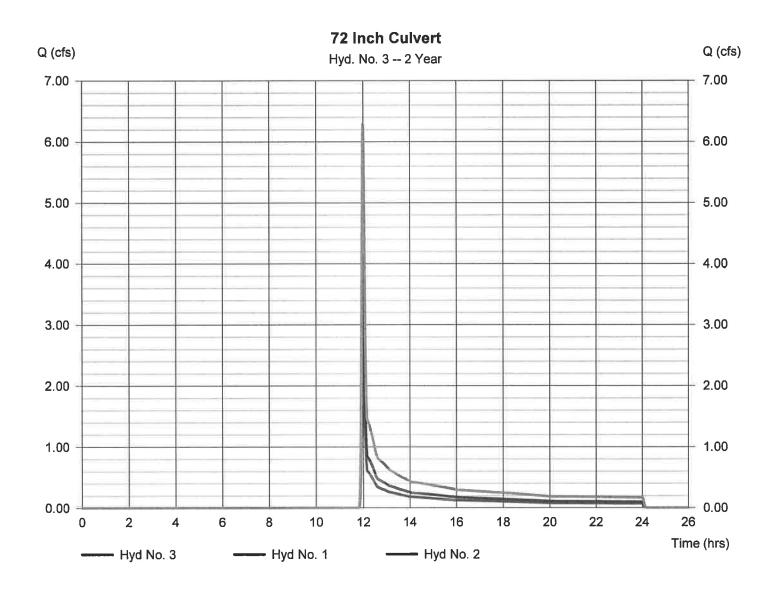
= 6.286 cfs = 11.98 hrs

Time to peak Hyd. volume

= 17,415 cuft

Contrib. drain. area

= 12.320 ac



Hydrograph Summary Report Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

lyd. Io.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	6.746	1	718	15,038	(S 110-11	H acans	Western Inlet
2	SCS Runoff	9.424	1	718	21,007		7 <u>1111 U</u>		Eastern Inlet
							C		

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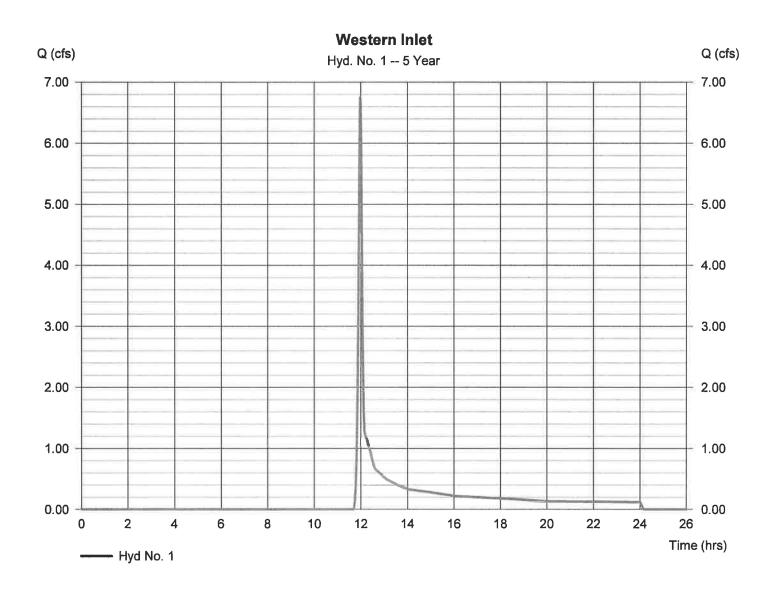
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

= SCS Runoff Hydrograph type Peak discharge = 6.746 cfsStorm frequency = 5 yrsTime to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 15,038 cuft Drainage area = 5.140 acCurve number = 60* Basin Slope = 0.0 %Hydraulic length = 0 ftTc method = User Time of conc. (Tc) $= 5.00 \, \text{min}$ Total precip. Distribution = Type II = 4.04 inStorm duration = 484 = 24 hrs Shape factor

^{*} Composite (Area/CN) = $[(4.790 \times 58) + (0.210 \times 85) + (0.140 \times 98)] / 5.140$



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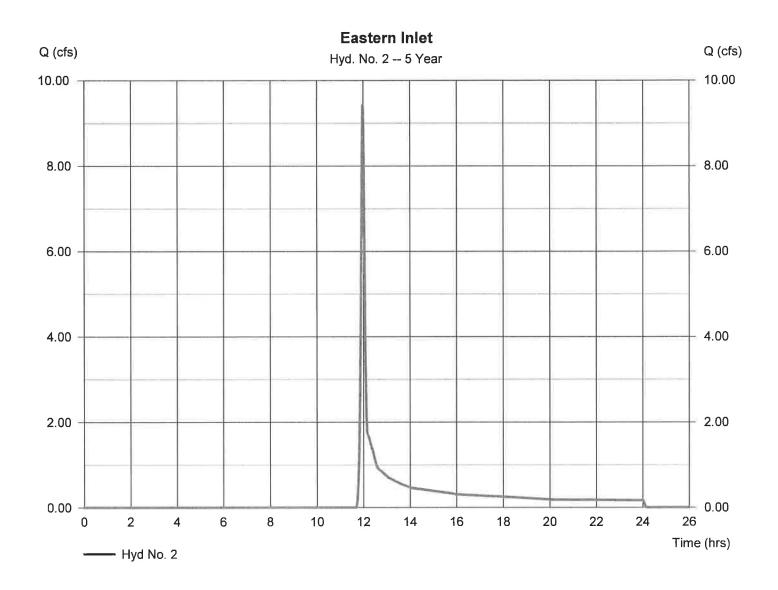
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type = SCS Runoff Peak discharge = 9.424 cfsStorm frequency Time to peak $= 11.97 \, hrs$ = 5 yrsTime interval = 1 min Hyd. volume = 21,007 cuftCurve number = 60* Drainage area = 7.180 acHydraulic length Basin Slope = 0.0 % = 0 ftTc method Time of conc. (Tc) $= 5.00 \, \text{min}$ = User Distribution = Type II Total precip. = 4.04 inStorm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(0.150 \times 98) + (0.230 \times 85) + (6.800 \times 58)] / 7.180$



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Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

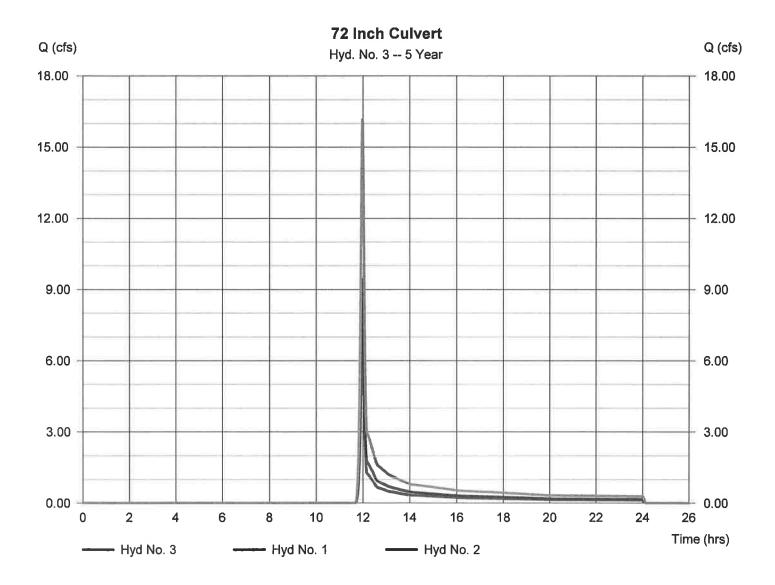
Hydrograph type Storm frequency Time interval Inflow hyds. = Combine

= 5 yrs

= 1 min = 1, 2 Peak discharge Time to peak = 16.17 cfs

Time to peak = 11.97 hrs Hyd. volume = 36,045 cuft

Contrib. drain. area = 12.320 ac



Hydrograph Summary Report Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

						Tiyaranon		ension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v1	
No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	11.11	1	718	23,257	*****	-	1-44	Western Inlet
2	SCS Runoff	15.52	1	718	32,488			Canada	Eastern Inlet
3	Combine	26.63	1	718	55,745	1, 2	115415	*******	72 Inch Culvert

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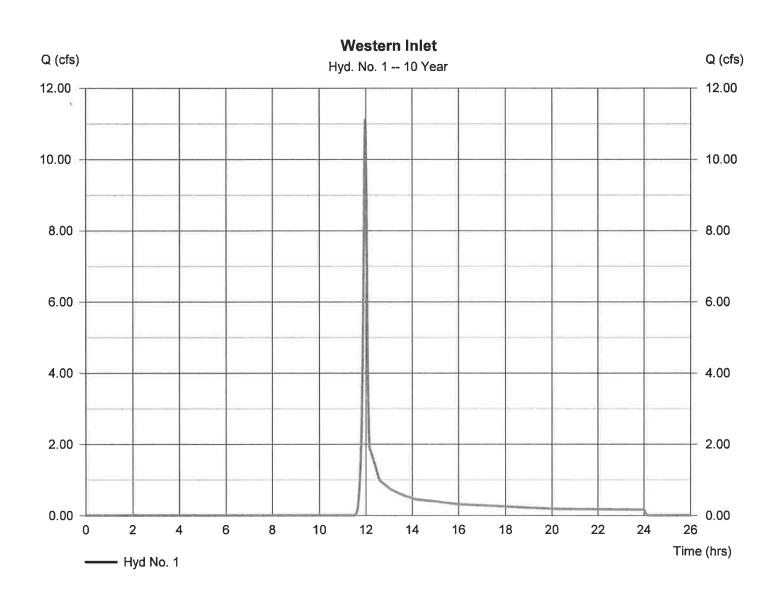
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type = SCS Runoff Peak discharge = 11.11 cfsStorm frequency = 10 yrsTime to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 23,257 cuft Drainage area = 5.140 acCurve number = 60* Basin Slope = 0.0 % Hydraulic length = 0 ftTc method Time of conc. (Tc) $= 5.00 \, \text{min}$ = User Total precip. = 4.84 inDistribution = Type II = 484 Storm duration = 24 hrs Shape factor

^{*} Composite (Area/CN) = $[(4.790 \times 58) + (0.210 \times 85) + (0.140 \times 98)] / 5.140$



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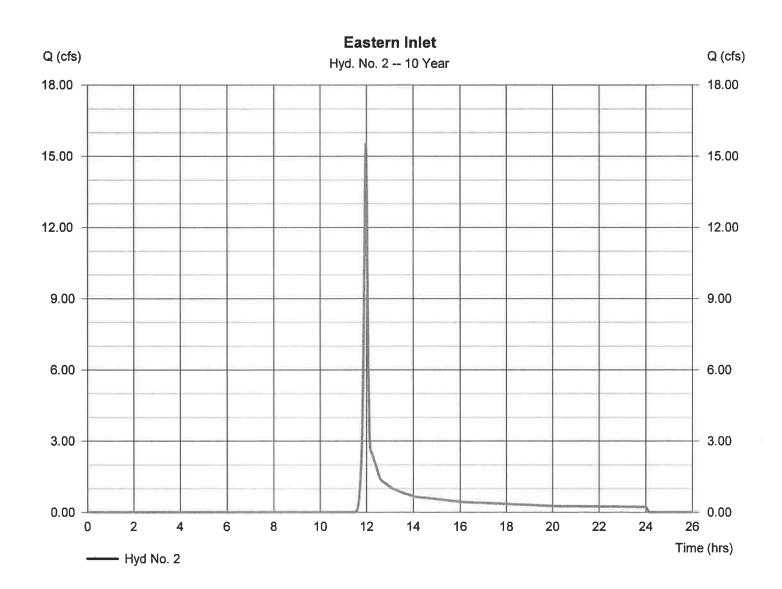
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

= SCS Runoff = 15.52 cfs Hydrograph type Peak discharge Storm frequency = 10 yrsTime to peak = 11.97 hrs Time interval = 1 min Hyd. volume = 32,488 cuft Curve number Drainage area = 7.180 ac= 60* Basin Slope = 0.0 %Hydraulic length = 0 ftTime of conc. (Tc) Tc method = User $= 5.00 \, \text{min}$ Total precip. = 4.84 inDistribution = Type II Storm duration Shape factor = 484 = 24 hrs

^{*} Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



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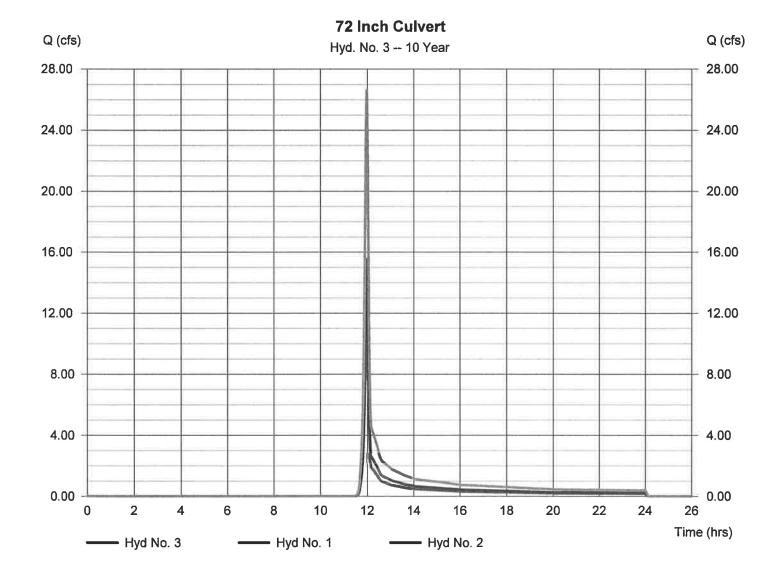
Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 1 min
Inflow hyds. = 1, 2

Peak discharge = 26.63 cfs
Time to peak = 11.97 hrs
Hyd. volume = 55,745 cuft
Contrib. drain. area = 12.320 ac



Hydrograph Summary Report

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					1907	Hydraflow	Hydrographs Ex	tension for Autol	CAD® Civil 3D® 2013 by Autodesk, Inc. v10
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	18.62	1	718	37,731	-			Western Inlet
2	SCS Runoff	26.01	1	718	52,705	******	H11000	******	Eastern Inlet
3	Combine	44.63	1	718	90,436	1, 2	****	*******	72 Inch Culvert
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Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

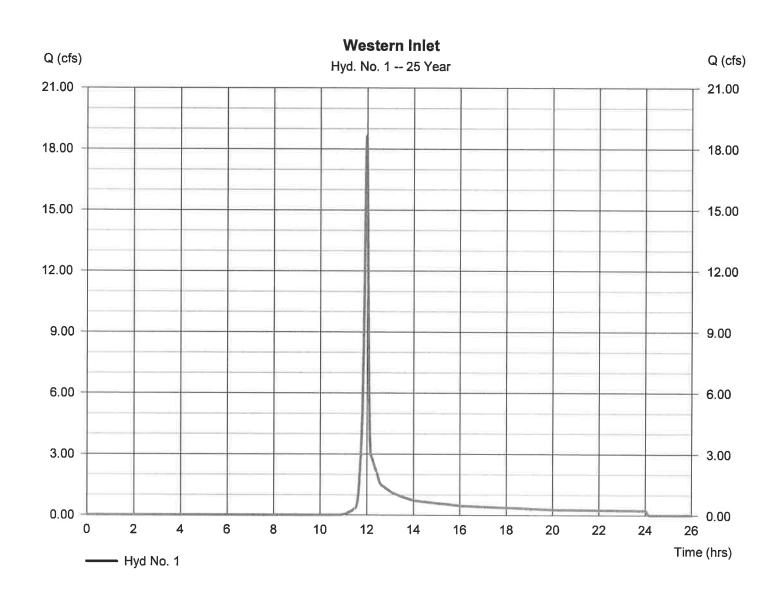
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type = SCS Runoff Peak discharge = 18.62 cfsStorm frequency = 25 yrs Time to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 37,731 cuftDrainage area = 5.140 acCurve number = 60* Basin Slope Hydraulic length = 0.0 % = 0 ftTc method = User Time of conc. (Tc) = 5.00 min Total precip. = 6.06 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(4.790 \times 58) + (0.210 \times 85) + (0.140 \times 98)] / 5.140$



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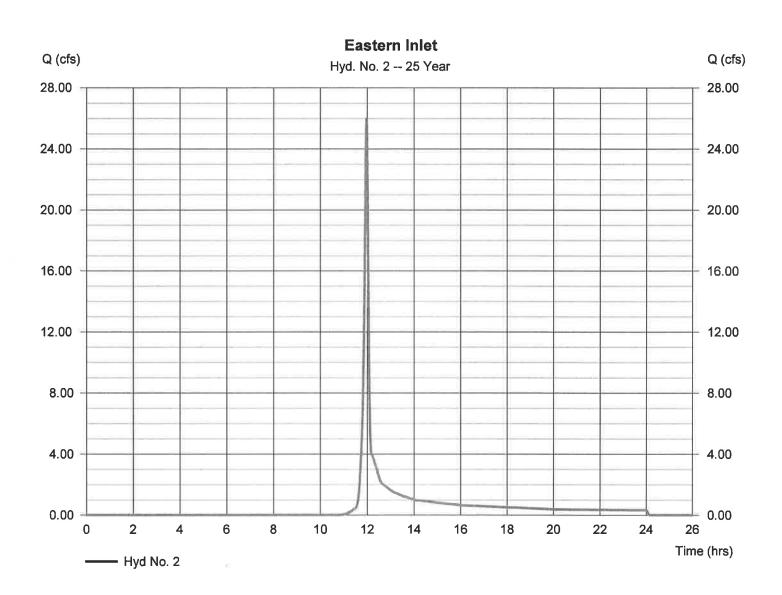
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type = SCS Runoff Peak discharge = 26.01 cfsStorm frequency = 25 yrsTime to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 52,705 cuftDrainage area = 7.180 acCurve number = 60* Basin Slope = 0.0 %Hydraulic length = 0 ftTc method = User Time of conc. (Tc) $= 5.00 \, \text{min}$ Total precip. = 6.06 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(0.150 \times 98) + (0.230 \times 85) + (6.800 \times 58)] / 7.180$



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Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type Storm frequency Time interval

Inflow hyds.

= Combine

= 25 yrs

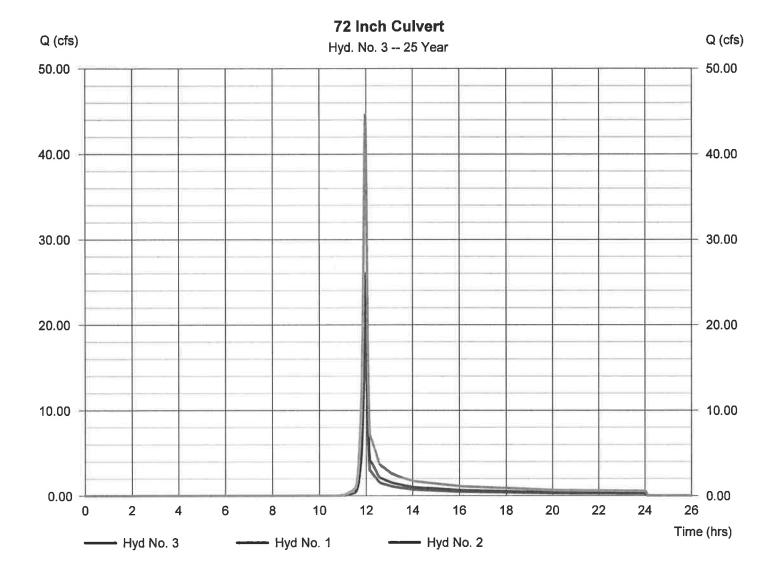
= 1 min = 1, 2

Peak discharge

= 44.63 cfsTime to peak $= 11.97 \, hrs$

Hyd. volume = 90,436 cuft

Contrib. drain. area = 12.320 ac



Hydrograph Summary Report Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

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Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	34.47	1	718	69,231			1 200000	Western Inlet
2	SCS Runoff	48.15	1	718	96,709	rauuuu#s		· ·	Eastern Inlet
3	Combine	82.62	1	718	165,940	1, 2	-1000	» Mannain	72 Inch Culvert
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Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

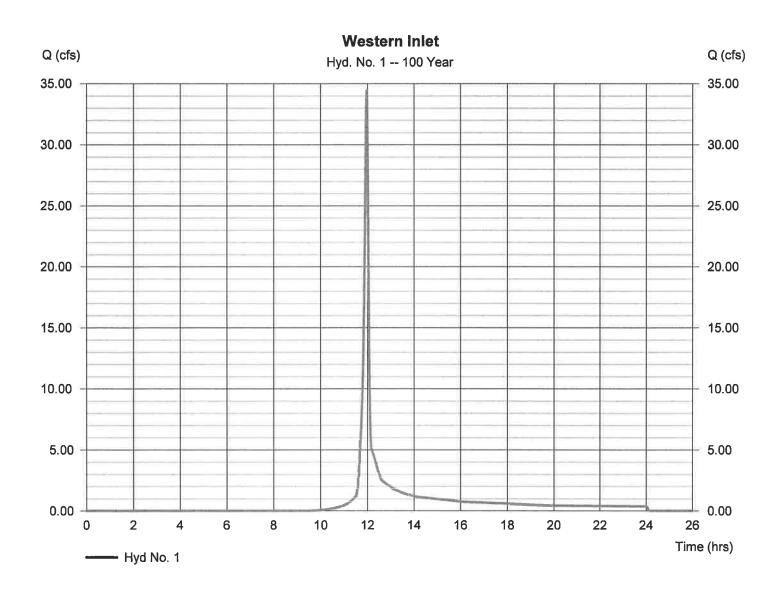
Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type = 34.47 cfs= SCS Runoff Peak discharge Storm frequency = 100 yrsTime to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 69,231 cuftCurve number Drainage area = 5.140 ac = 60* Basin Slope = 0.0 %Hydraulic length = 0 ftTc method Time of conc. (Tc) = User $= 5.00 \, \text{min}$ Total precip. = 8.35 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(4.790 \times 58) + (0.210 \times 85) + (0.140 \times 98)] / 5.140$



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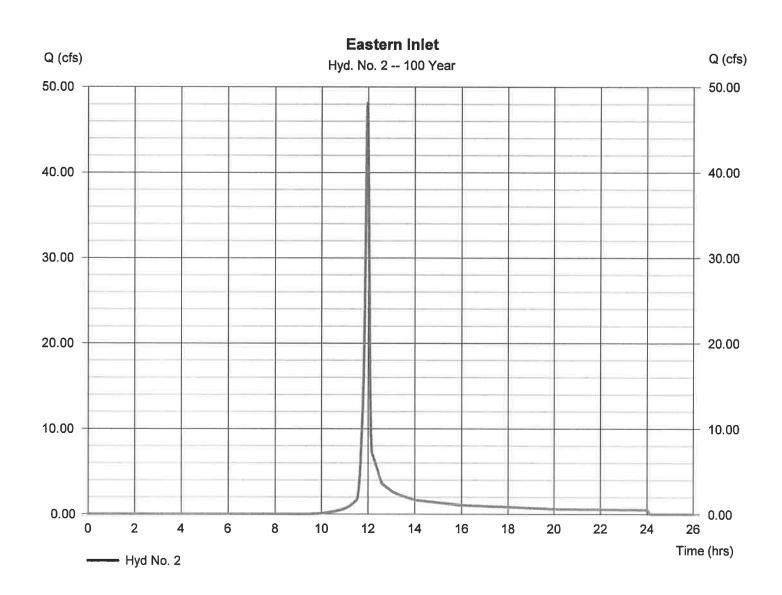
Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type = SCS Runoff Peak discharge = 48.15 cfsStorm frequency = 100 yrsTime to peak $= 11.97 \, hrs$ Time interval = 1 min Hyd. volume = 96,709 cuftDrainage area = 7.180 acCurve number = 60*Basin Slope = 0.0 %Hydraulic length = 0 ftTc method Time of conc. (Tc) = User $= 5.00 \, \text{min}$ Total precip. = 8.35 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484

^{*} Composite (Area/CN) = $[(0.150 \times 98) + (0.230 \times 85) + (6.800 \times 58)] / 7.180$



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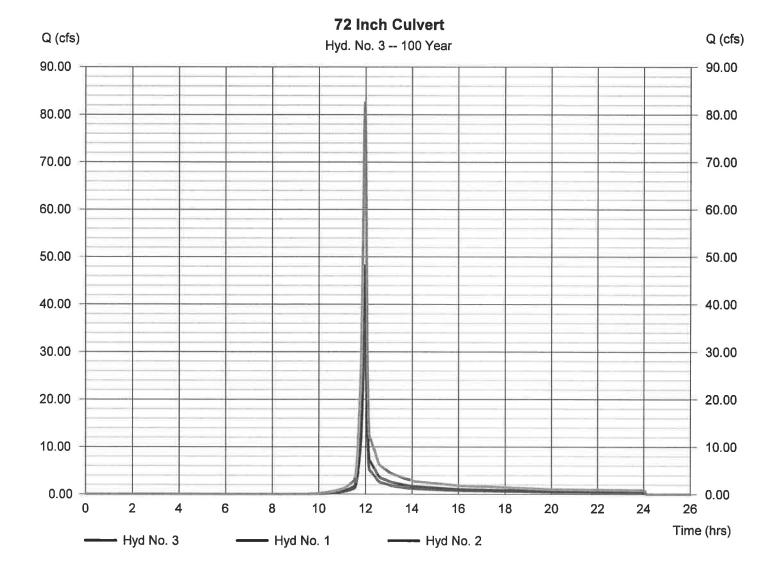
Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 1 min
Inflow hyds. = 1, 2

Peak discharge = 82.62 cfs
Time to peak = 11.97 hrs
Hyd. volume = 165,940 cuft
Contrib. drain. area = 12.320 ac



Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On February 8, 2016, four-hour composite samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, <u>prior</u> to mixing with any stormwater. These samples were collected concurrent with the four-hour composite samples collected from Outfall 010 for DMR compliance and were analyzed for all Outfall 010 parameters except whole effluent toxicity.

Results for the February 8, 2015 toe-drain samples were remarkably similar to the results for previous samples from this location (provided by email dated January 6, 2016) indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge (see Table 1 attached). In addition, the concentrations of all measured parameters are well below the newly established VPDES limits and applicable water quality criteria, and are within the range of values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Permit compliance samples from Outfall 010 were collected on February 8, 2016 concurrent with collection of the samples from the toe-drain portion of the discharge. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek, and were analyzed for all DMR parameters except chronic toxicity. Each 7-day chronic test requires the collection of three (3) 24-hour composite samples over a 5-day period. As reported to DEQ by email dated February 18, 2016, all flow from Outfall 010 was stopped on Friday, February 12, 2016. Therefore, Dominion was unable to collect a sufficient number of samples to conduct the chronic tests.

Path Forward

As noted above, all flow from Outfall 010 was stopped on Friday, February 12, 2016 following the insertion of an inflatable plug in the downstream end of the 72 inch discharge pipe. Insertion of the plug isolated the toe drain and stormwater contributions to Outfall 010, which have been collected and pumped to Ash Pond D. Since February 12, Dominion has initiated efforts to permanently plug the 72" discharge pipe. This will be accomplished by construction of a one-foot wide concrete plug in the downstream end of the pipe. Following installation and curing of the plug the remainder of the pipe will be backfilled with concrete. All accumulated sediment has been removed from the 72" pipe and pouring of the concrete plug was initiated on March 2, 2016.

Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On December 14 and 18, 2015, duplicate samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, <u>prior</u> to mixing with any stormwater. These samples were analyzed for the constituents for which DEQ had proposed monitoring in <u>thea</u> draft <u>VPDES</u> permit. The results of these samples were provided to DEQ by email on January 6, 2016, and are attached.

Results for the two sets of toe drain samples are remarkably similar, indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge. In addition, the concentrations of all measured parameters are well below the-newly established VPDES limits and applicable water quality criteria, and are within the-range of-values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Compliance samples reported with this DMR were collected from Outfall 010 on January 21, 2016, following the initial snowfall associated with a major winter storm event. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek.

Results of the January 21, 2016 sample showed increased concentrations of a number of constituents (e.g., total copper, total nickel, and total zinc) when compared with the December 2015 toe drain samples. This suggests that stormwater [Ai]contributions to the discharge may affect constituent concentrations in the final discharge. In addition, the discharge pipe for Outfall 010 contains a considerable amount of sediment, which could also have contributed to the observed results.

Path Forward

Dominion is undertaking efforts to stop [A2]all discharge from Outfall 010 and expects to complete this process before February 13, 2016. These efforts include installing a 72" inflated plug at the outlet of the 72" pipe. This plug will seal off any water movement out of the pipe. Pumps will be placed in the drop inlet feeding the 72" pipe to remove storm water and toe drain waters. The pump discharge will be routed to D Pond.



DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company Possum Point Power Station Coal Combustion Residual Surface Impoundment Closures Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016



Prepared by: GAI Consultants, Inc. Richmond Office 4198 Cox Road, Suite 114 Glen Allen, Virginia 23060 Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016

Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

Prepared by:
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4198 Cox Road, Suite 114
Glen Allen, Virginia 23060-3328

	Report Authors:	
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4	John Klamut Engineering Manager	

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective in January 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of stormwater flows associated with the Ash Pond D closure activities. The purpose of this document is to present Dominion's plan to restore stormwater only flows to the previously outfall associated with the Pond D toe drain, referred to as Outfall 010 or S107. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1.F.23.:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1.A.15, Part I.E and Part I.F.18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dryweather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

3.0 Original System Description

Previous discharges at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by Figure 1 and Figure 2, attached in Appendix A, the storm sewer system is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and



downstream inlets are connected by 18-inch concrete pipe. The system previously discharged through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. However, the 72-inch culvert has been abandoned in place & water captured in the downstream inlet structure is pumped into Pond D. As shown on Figure 1 in Appendix A, the total contributing drainage area for the two inlets is approximately twelve (12) acres. The hydrologic and hydraulic calculations are included in Appendix B.

4.0 Proposed System Description

Three storm drain design options are being provided as a part of this conceptual design plan. Per VDOT design requirements, the proposed system will be designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction-vegetated condition. Pipe installation will be completed in accordance with the VDOT 2008 Road and Bridge Standards. Conducting work inside of the VDOT owned right-of-way will require obtaining the proper VDOT Land Use Permits.

The options will include the installation of a VDOT standard DI-7B inlet (see Figure 5 in Appendix A). The proposed inlet structure will tie into the existing 18-inch storm sewer pipe approximately 30 feet west of the existing drop inlet. The remaining portion of the 18-inch pipe will be abandoned in place by backfilling with flowable fill. Option 1 will include a single barrel crossing consisting of a 36-inch corrugated plastic pipe (CPP) to be installed across Possum Point Road utilizing an open cut method. Option 2 will include replacing the existing 18-inch storm sewer pipe at a shallower depth and installing a single barrel 36-inch CPP pipe crossing Possum Point Road. Option 3 will utilize trenchless technology. A single-barrel crossing allowing for bore and jack installation under Possum Point Road.

4.1 Storm Drain Design - Option 1

The proposed layout of the Option 1 Storm Drain System is shown on Figure 2 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. Opencut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 10 feet per second (fps). Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will include be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 1 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about \$53,000 (see Appendix C).

4.2 Storm Drain Design - Option 2

The proposed layout of the Option 2 Storm Drain System is shown on Figure 3 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. This option also includes replacing the existing 18-inch storm sewer pipe to reduce the depth of the system. The system will be designed to minimize the amount of cover. This will minimize the cost of and duration of the installation process. It will also minimize the depth of trench excavation required along Possum Point Road. The contractor should locate existing underground utilities along Possum Point Road and determine depths by potholing prior to construction. As with Option 1, open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection



Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 9 fps. Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 2 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 2 Storm Drain System will be about \$52,000 (see Appendix C).

4.3 Storm Drain Design - Option 3

The proposed layout of the Option 3 Storm Drain System is shown on Figure 4 in Appendix A. Option 3 will utilize jack & boring technology to reduce the impact to the roadway. The crossing pipe will consist of a 24-inch diameter conduit, 110 feet in length. A VDOT Land Use Permit is still required when crossing a roadway using trenchless technology. Equipment laydown areas and the boring pit will be located outside the limits of the VDOT right-of-way and if a receiving pit is required, it will be located outside the limits of the wetlands on the downstream end. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 18 fps. Outlet Protection will be designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection is anticipated to be achieved through a riprap energy dissipator. For the purposes of this draft design concept, a detailed design of the energy dissipator has not been completed. After successful installation – the Outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 3 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about \$175,000 (see Appendix C).



APPENDIX A Figures



FIGURE 1 Drainage Area Map



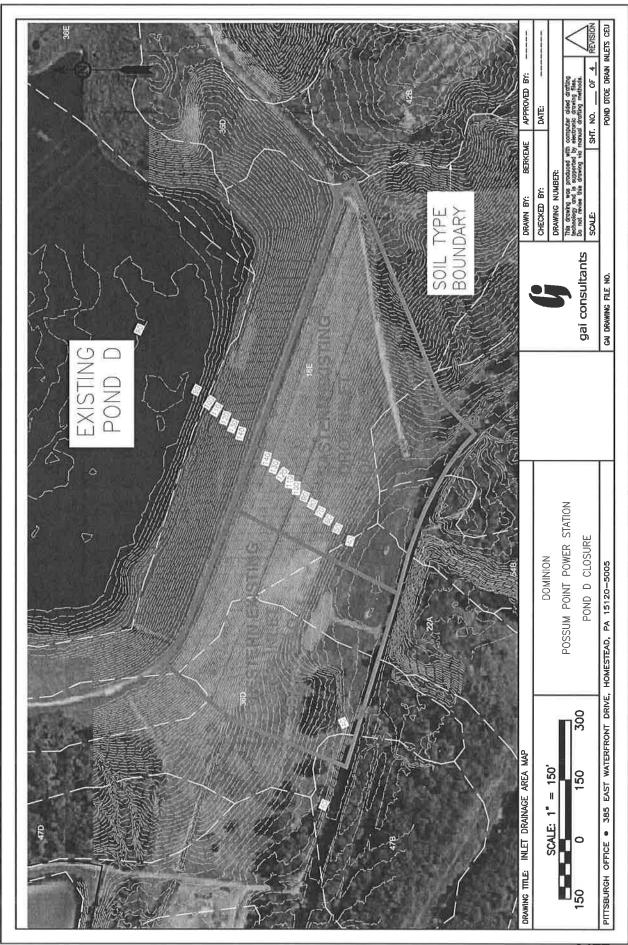


FIGURE 2 Option 1 - Storm Drain Design Layout



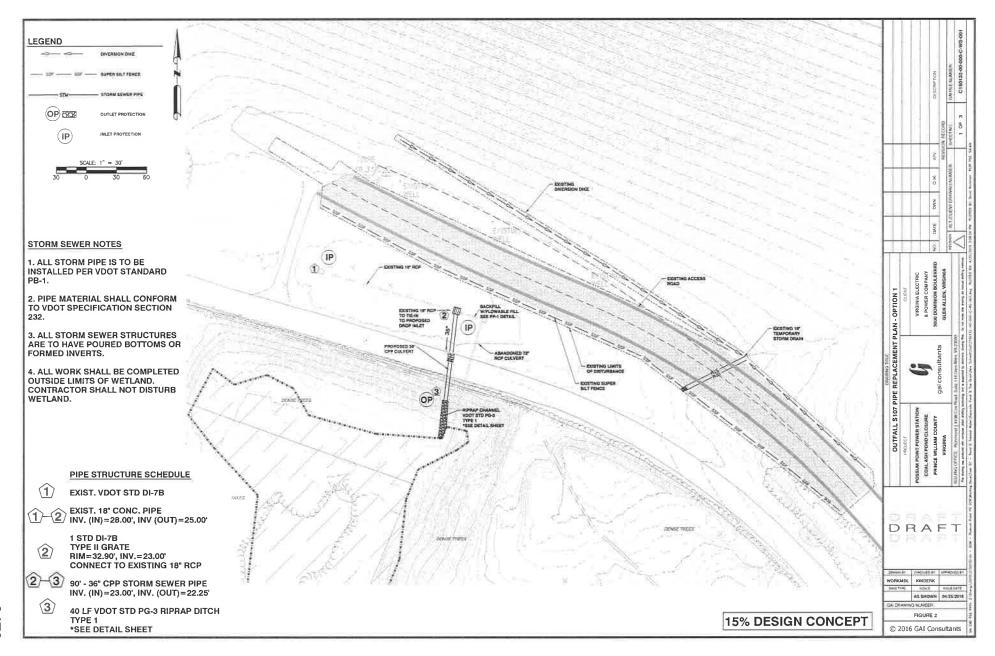


FIGURE 3 Option 2 — Storm Drain Design Layout



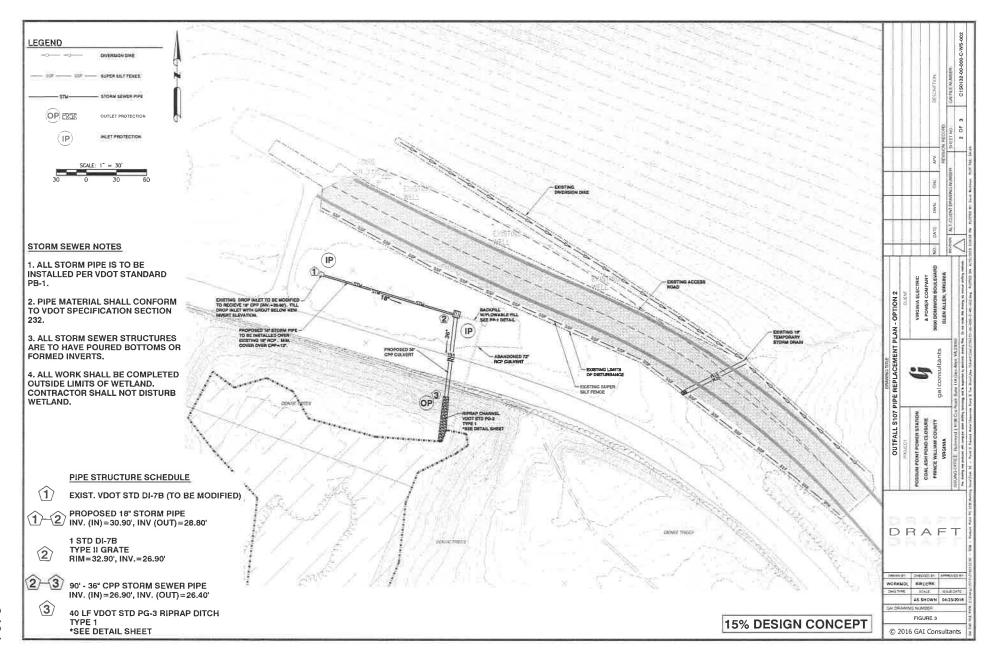


FIGURE 4 Option 3 — Storm Drain Design Layout



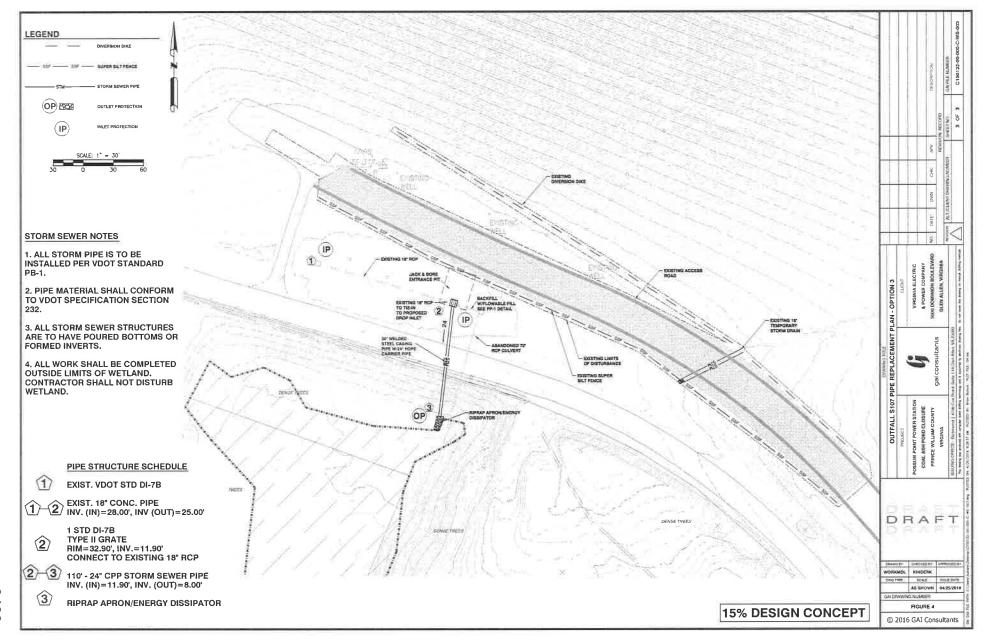
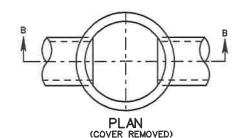


FIGURE 5 VDOT Standard DI-7B Drop Inlet Detail



DI-7, 7A, 7B

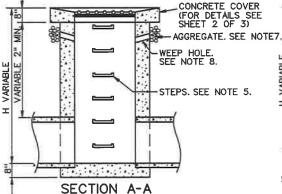


GROUT.

(COVER REMOVED)
A-4'-4" (12" - 36" PIPE)
B-3'-0" (12" - 36" PIPE)
A-4'-10" (42" PIPE)
B-3'-6" (42" PIPE)

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ž



В

PLAN

CAST IN PLACE
FOR USE WITH 12" TO 42" PIPES

H DIMENSION

CORR. METAL

2'-5"

2'-8"

2'-11"

3'-2"

3'-5"

3'-8"

3'-11"

4'-2"

4'-5"

4'-11"

RECOMMENDED MINIMUM

HEIGHT CHART

CONC.

2'-6"

2'-91/4"

3'-01/2"

3'-33/4"

3'-7"

3'-101/4"

4'-1/2"

4'-43/4"

4'-8"

5'-21/2"

CONCRETE COVER
(FOR DETAILS SEE
SHEET 2 OF 3)

AGGREGATE.
SEE NOTE7.

WEEP HOLE.
SEE NOTE 8.

LIFT HOLES

SECTION B-B
PRECAST

NOTES (CONT.)

15.	DI-7	NO GUT	TER			
	DI-7A				DROP	INLET
		IS ON A	A GRADE	•		
	DI-7B					
		IS IN A	SAG BE	TWEEN	TWO	GRADE:

- 16. FOR DETAILS OF PRECAST DI-7 NOT SHOWN HEREON SEE PRECAST UNIT ASSEMBLY DIAGRAM, PAGE 103.01, FOR PRECAST GENERAL NOTES, PAGE 103.02 AND FOR APPLICABLE PRECAST BASE, RISER AND TOP DETAILS, PAGES 103.07 THRU 103.12.
- 17. GRATE BARS TO BE PARALLEL TO DITCH FLOW.

PIPE SIZE	12"	15"	18"	24"	30"	36"	42"
MINIMUM DEPTH	2'-0"	2'-31/4"	2'-61/2"	3'-1"	3'-71/2"	4'-2"	4'-81/2"
CONCRETE CUBIC YARDS	.947	1.045	1.143	1.339	1.535	1.731	1.927

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS.

- THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS. MAXIMUM DEPTH (H) TO BE 12"-8.
- 3. WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICEN FOR THE STRUCTURE.
- I. IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
- STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.
- REINFORCED CONCRETE FOOTING MAY BE PRECAST OR CAST-IN-PLACE. TWO LIFTING HOOKS OF FABRICATORS DESIGN TO BE PROVIDED IN PRECAST FOOTING
- 4" DEPTH AGGREGATE #68, #78, OR #8 X 6" WIDTH.
- 3. 3" DIAMETER WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.03", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
- 9. THE TYPE OF INLET (PRECAST OR CAST IN PLACE), DETAILED HEREON, TO BE CONSTRUCTED, WILL BE AT THE OPTION OF THE CONTRACTOR.
- O. FOR DETAILS OF CONCRETE COVER, COLLAR AND GRATE AND THE METHOD OF PLACING APPROACH GUTTER SEE SHEET 2 OF 3.
- CAST-IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
- 12. CONCRETE QUANTITIES SHOWN ARE FOR INDICATED DEPTH (H) WITHOUT PIPES. THE AMOUNT DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES. FOR INLETS OF DIFFERENT DEPTHS ADD OR SUBTRACT THE APPROPIATE CUBIC YARDS OF CONCRETE FOR EACH FOOT OF DEPTH.
- 13. PAVED DITCHES ARE TO BE TRANSITIONED TO MEET INLET GUTTER AS SHOWN IN STANDARD PG-2A.
- 14. PROVIDE SAFETY SLABS WHEN SPECIFIED ON THE PLANS.

CODIC	MKUS						_			
INCREMENT	PER	FOOT	OF	ADDITIONAL	DEPTH	(H) {	= 0.362 = 0.410	CU. YDS.	(12" - 36" (42" PIPE)	PIPE)

SPECIFICATION REFERENCE	I
241 503	

PIPE

SIZE

12"

15"

18"

21"

24"

27"

30"

33"

36"

42"

STANDARD MEDIAN DROP INLET

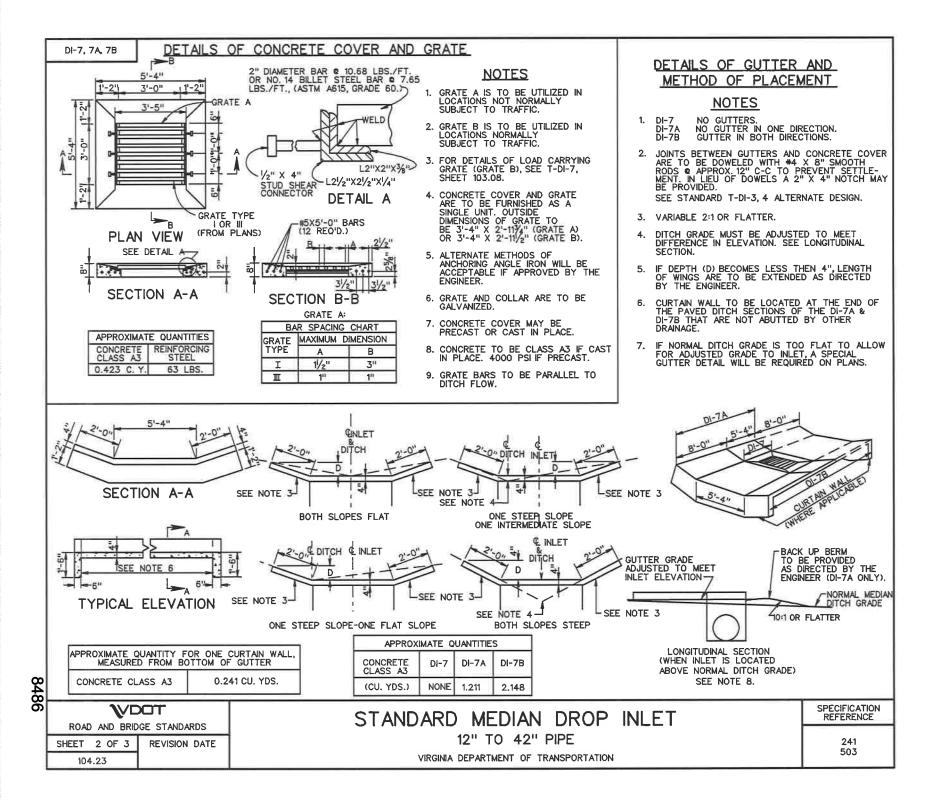
12" TO 42" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

ROAD AND BRIDGE STANDARDS

REVISION DATE

SHEET 1 OF 3

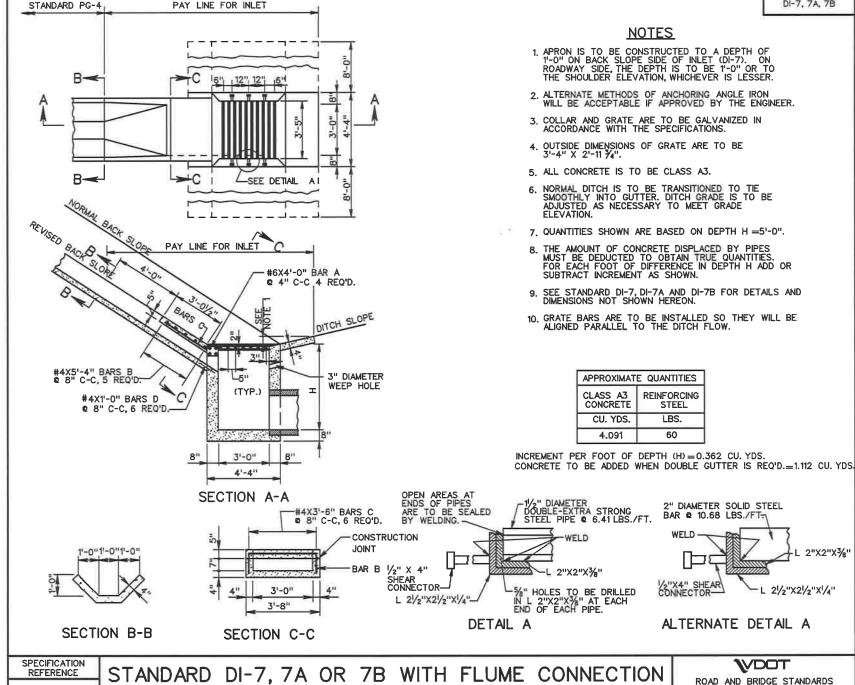




SHEET 3 OF 3

104.24

REVISION DATE



12" TO 36" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

502

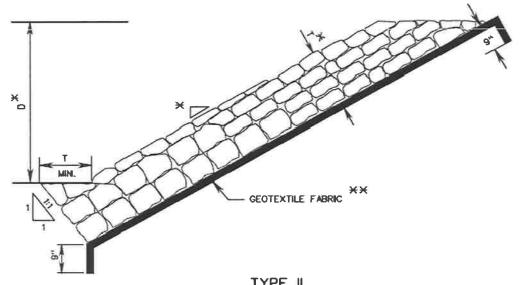
FIGURE 6 VDOT Standard PG-A Type 1 RipRap Channel Detail





RipRap Class	1
Thickness (T)	26"
Depth (D)	18"
Width (W)	24"
Slope	2:1

TYPE I RIPRAP DITCH PROTECTION



NOTES:

** RIP RAP BEDDING MATERIAL

GEOTEXTILE FABRIC TO BE PROVIDED UNDER ALL RIPRAP INSTALLATIONS CLASS AI, CLASS I AND CLASS II UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

RIPRAP INSTALLATIONS OF CLASS INSHALL HAVE AN INTERMEDIATE AGGREGATE BEDDING LAYER(S) AS SPECIFIED ON THE PLANS BASED ON GEOTECHNICAL RECOMMENDATIONS.

* SEE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL AND RIPRAP THICKNESS.

TYPE II RIPRAP SLOPE PROTECTION

₩DOT

PG-3

ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1 REVISION DATE.

STANDARD RIP RAP DITCH & SLOPE PROTECTION PG-3

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

245 414

APPENDIX B Hydrologic and Hydraulic Calculations



SUBJECT POSSUM POINT CCR F	OND CLOSURES	40
STORM DRAIN DESIGN CAL	CULATIONS - OUTFALL S107	l i
BY BULLOBW DATE 04/	18/2016 PROJ. NO. <u>C150132.00</u>	
CHKD. BY DATE 04/19/2016	PAGE 1 of 5	gai consultants

INTRODUCTION:

Modifications to the existing stormwater conveyance system (72-inch RCP culvert) have been made in order to separate groundwater & stormwater flows at Outfall 010/S107. The modifications include installing a VDOT Standard. DI-7 drop inlet upstream of the existing inlet structure. The proposed inlet structure will tie into an existing 18" storm sewer pipe – conveying stormwater flows to the same Unnamed Tributary of Quantico Creek as the original system. The proposed storm drain is designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction / re-vegetated condition.

This calculation is intended to size the storm drain system based on peak flows determined from the Site Hydrology calculations. Analysis will utilize the Federal Highway Administration's program, HY-22.

METHODOLOGY:

The approximate locations of storm inlets and pipes are included on the plan drawings provided with this calculation package. From these locations, estimates were made for the ground surface elevations at the proposed inlet structure invert and outlet locations as well as roadway elevations.

ATTACHMENTS:

- 1. HY-22 Calculations
- 2. Pond D Construction Drawing
- 3. VDOT Standard PG-3 RipRap Ditch Detail

REFERENCES:

- 1. 2008 VDOT Road and Bridge Standards
- 2. VDOT Drainage Manual Chapter 7
- 3. GAI Submittal "Inlet Hydrology"

REQUIREMENTS / ASSUMPTIONS:

- Minimum cover above culverts is 1 ft.
- Circular culverts will be corrugated exterior, smooth interior HDPE.
- Storm drain outlet conditions are set using the existing receiving channel dimensions.

SUBJECT POSSUM POINT CCR POND CLOSURES STORM DRAIN DESIGN CALCULATIONS - OUTFALL S107 BULLOBW DATE 04/18/2016 PROJ. NO. C150132.00 BY CHKD. BY __ DATE_04/19/2016 PAGE 2 of 5

STORM DRAIN DESIGN:

The proposed storm drain system will convey approximately 12 acres of runoff from the Pond D embankment and construction staging area. The system will be comprised of two inlets with the combined peak flows being conveyed through a proposed 36" storm sewer pipe crossing Possum Point Road. Design flow to the system will be estimated assuming the post development condition for Pond D. In accordance with the VDOT Standard for a Secondary Roadway - The storm drain will be assessed for the 10-year design event.

The HY-22 Input and Output is included as Attachment 1 and is summarized below:

Design Flow (10 Year, 24 Hour Post Development) 31.00 cfs

Option 1

Proposed Inlet Rim Elevation 32.90 ft 0.008 ft/ft Outfall Pipe Slope

Outfall Pipe Length 90 ft Outfall Pipe Diameter 3 ft Number of Barrels 1.0

Outfall Pipe Inv. Elev. 23.00 ft Outlet Elevation 22.25 ft Roadway Elevation 36.00 ft Minimum Cover Provided 10.0 ft

Outlet Conditions

Receiving Channel Unnamed Trib. Of Quantico Creek

Channel Depth 3 ft Side Slopes = 2H:1V **Bottom Width** 4 ft

Option 2

Proposed Inlet Rim Elevation 32.90 ft Outfall Pipe Slope 0.006 ft/ft

Outfall Pipe Length 90 ft Outfall Pipe Diameter = 3 ft Number of Barrels 1.0

gai consultants

SUBJECT POSSUM POINT CCR POND CLOSURES

STORM DRAIN DESIGN CALCULATIONS - OUTFALL S107

BULLOBW DATE 04/18/2016 PROJ. NO. C150132.00

CHKD. BY ___ DATE_ 04/19/2016__ PAGE 3 of 5 gai consultants

26.90 ft Outfall Pipe Inv. Elev. **Outlet Elevation** 26.40 ft

Roadway Elevation 36.00 ft Minimum Cover Provided = 6.0 ft

Outlet Conditions

Unnamed Trib. Of Quantico Creek Receiving Channel

Channel Depth 3 ft 2H:1V Side Slopes = **Bottom Width** 4 ft

Option 3

Proposed Inlet Rim Elevation 32.90 ft Outfall Pipe Slope 0.035 ft/ft

Outfall Pipe Length 100 ft Outfall Pipe Diameter 2 ft Number of Barrels 1.0

11.90 ft Outfall Pipe Inv. Elev. =**Outlet Elevation** 8.00 ft Roadway Elevation 36.00 ft Minimum Cover Provided = 22.0 ft

Outlet Conditions

OUTLET PROTECTION DESIGN (Options 1 and 2):

VDOT Standard PG-3 Type 1 RipRap Channel Design:

The maximum velocity during the 10-Yr storm event was calculated to be about 10 ft/sec. Due to the Outfall being located on the Possum Point Road Fill Embankment – a RipRap lined channel was chosen over traditional Outlet Protection. As per VDOT Standard - Outlet protection stone to be Class 1 – 26" Dry RipRap Type 1.

CHANNEL SIZE:

The figure on the following sheet illustrates the typical cross-section of the proposed channel. The stone type & thickness has been designed in accordance with Chapter 7 of the VDOT Drainage.

SUBJECT POSSUM POINT CCR POND CLOSURES

STORM DRAIN DESIGN CALCULATIONS - OUTFALL S107

BY <u>BULLOBW</u> DATE <u>04/18/2016</u> PROJ. NO. <u>C150132.00</u>

CHKD. BY ___ DATE <u>04/19/2016</u> PAGE <u>4 of 5</u> gai consultants

Outlet Protection Channel Bottom Width (W) = 24"

Outlet Protection Channel Side Slope = 2:1

Outlet Protection Channel Depth (D) = 18"

Outlet Protection Channel Stone Thickness (T) = 26"

Rock size = VDOT Class I ($D_{50} = 1.1 \text{ ft}$)



SUBJECT POSSUM POINT CCR POND C	LOSURES	10
STORM DRAIN DESIGN CALCULAT	IONS - OUTFALL S107	l i
BY <u>BULLOBW</u> DATE <u>04/18/2016</u>	PROJ. NO. <u>C150132.00</u>	
CHKD. BY DATE_ 04/19/2016	PAGE <u>5 of 5</u>	gai consultants

ATTACHMENT 1 HY-22 CALCULATIONS



Element Details			
ID	26	Notes	
	Base		
Label	Calculation Options		
	Options		
Hydraulic Summary			
Flow Profile Method	Backwater		Actual
Flow Profile Method	Analysis	Average Velocity Method	Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence	0.00 ft	Minimum Time of	0.080 hours
Test	0.0011	Concentration	0.000 110013
Inlets			
Neglect Side Flow?	False	Active Components for	Grate and
5		Combination Inlets In Sag	Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and
ror Side Flow?		Combination Thiets on Grade	Curb
HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070
Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

Bentley Systems, Inc. Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666

Bentley StormCAD V8i (SELECTseries 3) [08.11.03.84] Page 1 of 3

Gravity Hydraulics		
Governing Upstream Pipe	Pipe with	
Selection Method	Maximum QV	

Catchment Summary

Label	Area (User Defined) (acres)	Time of Concentration (hours)	Rational C	Catchment CA (acres)
Western Inlet	5.100	0.100	0.500	2.550
Eastern Inlet	7.200	0.100	0.500	3.600
Catchment Intensity (in/h)	Catchment Rational Flow (cfs)			
5.000	12.85			
5.000	18.14	4		

Conduit Summary

Label		Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1 - 2		Circle	1	Outfall S107	12.85
2-3		Circle	1	Outfall S107	31.00
PG-3 Channel		(N/A)	1	Outfall S107	31.00
Velocity (ft/s)	74	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
	9.80	29.35	26.04	1.35	1.04
	9.80	24.81	23.69	1.81	1.44
	8.78	23.55	10.92	1.30	0.92

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	Outfall S107	12.85	12.85
2	Catch Basin	Outfall S107	31.00	31.00
Outfall S107	Outfall	(N/A)	(N/A)	31.00
3	Cross Section	Outfall S107	31.00	31.00
Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)	
33.90	28.00	30.26	30.26	
32.90	23.00	26.30	25.56	
14.00	10.00	(N/A)	(N/A)	
28.00	22.25	24.89	23.97	

Inlet Summary

1	Label	Inlet Type Catalo	g Inlet Type Catal	og Inlet Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14

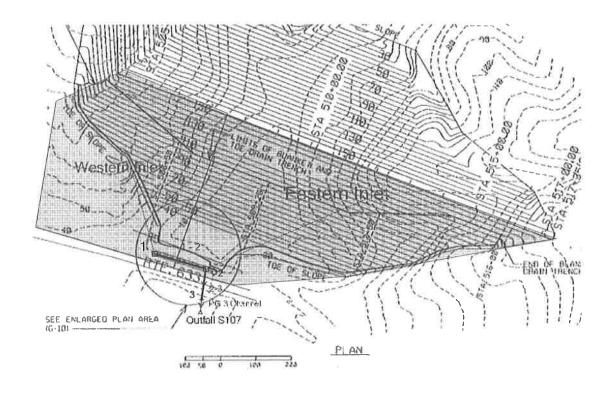
Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666 Bentley StormCAD V8i (SELECTseries 3) [08.11.03.84] Page 2 of 3

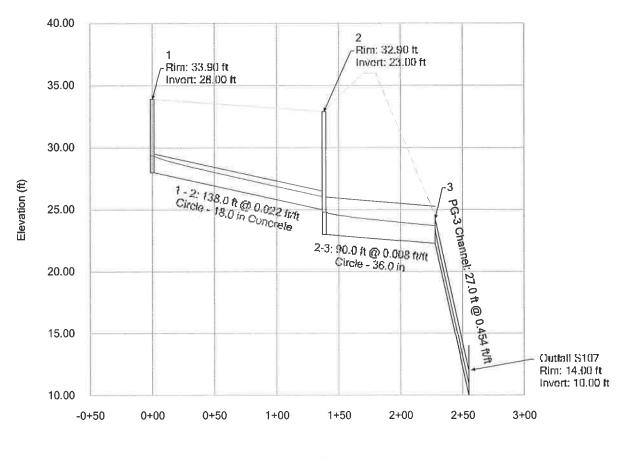
Inlet Summary

Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)
		Pond Summary		
Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
Hydraulic Grade (ft)	Volume (gal)			

Scenario: Base



Profile Report Engineering Profile - Profile - 1 (Outfall S107 Design_Option 1.stsw)



Element Details			
ID	26	Notes	
Label	Base Calculation Options		
Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.00 ft	Minimum Time of Concentration	0.080 hours
Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and Curb
HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070
Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

Bentley Systems, Inc. Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666

Bentley StormCAD V8i (SELECTseries 3) [08.11.03.84] Page 1 of 3

Gravity Hydraulics		
Governing Upstream Pipe	Pipe with	
Selection Method	Maximum QV	

Catchment Summary

Label	Area (User Defined) (acres)	Time of Conc (hours		Rational C	Catchment CA (acres)
Western Inlet	5.100	- 6	0.100	0.500	2.550
Eastern Inlet	7.200		0.100	0.500	3.600
Catchment Intensity (in/h)	Catchment Rational Flow (cfs)				
5.000	12.85	Î			
5.000	18.14]			

Conduit Summary

Label		Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1 - 2		Circle	1	Outfall S107	12.85
2-3		Circle	1	Outfall S107	31.00
PG-3 Channel		(N/A)	1	Outfall S107	31.00
Velocity (ft/s)		Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
	8.36	32.25	30.02	1.35	1.22
	8.42	28.71	27.97	1.81	1.57
	8.89	27.70	10.91	1.30	0.91

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	Outfall S107	12.85	12.85
2	Catch Basin	Outfall S107	31.00	31.00
Outfall S107	Outfall	(N/A)	(N/A)	31.00
3	Cross Section	Outfall S107	31.00	31.00
Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)	50
33.90	30.90	33.16	33.16	
32.90	26.90	29.79	29.46	
12.00	10.00	(N/A)	(N/A)	
29.00	26.40	28.76	28.12	

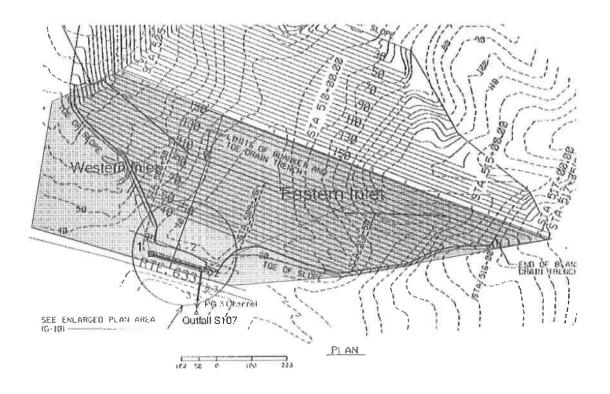
Inlet Summary

Label	Inlet Type	Catalog Inlet Type	Catalog Inlet	Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14

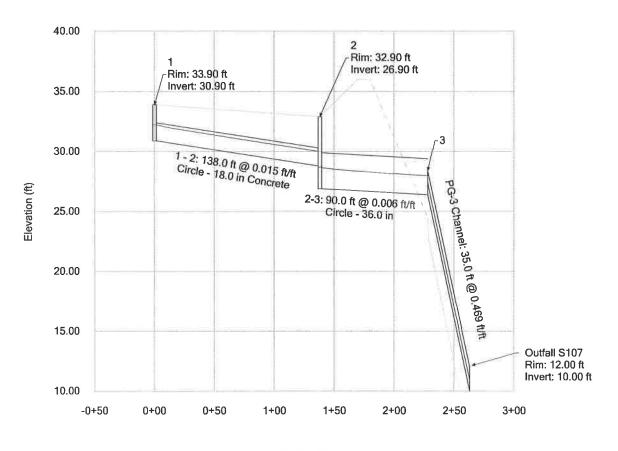
Inlet Summary

Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)
		Pond Summary		
Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
Hydraulic Grade (ft)	Volume (gal)			

Scenario: Base



Profile Report Engineering Profile - Profile - 1 (Outfall \$107 Design_Option 2.stsw)



Element Details			
ID	26 Page	Notes	
Label	Base Calculation Options		
Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.00 ft	Minimum Time of Concentration	0.080 hours
Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and Curb
HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070
Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

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Bentley StormCAD V8i (SELECTseries 3) [08.11.03.84] Page 1 of 3

Gravity Hydraulics		
Governing Upstream Pipe	Pipe with	
Selection Method	Maximum QV	

Catchment Summary

Label	Area (User Defined) (acres)	Time of Concentration (hours)	Rational C	Catchment CA (acres)
Western Inlet	5.100	0.100	0.500	2.550
Eastern Inlet	7.200	0.100	0.500	3.600
Catchment Intensity (ln/h)	Catchment Rational Flow (cfs)			
5.000	12.85			
5.000	18.14			

Conduit Summary

	Label	Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1-2		Circle	1	3	12.85
2 - 3		Circle	1	3	31.00
	Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
	9.80	29.35	26.04	1.35	1.04
	18.12	13.78	9.17	1.88	1.17

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	3	12.85	12.85
2	Catch Basin	3	31.00	31.00
3	Outfall	(N/A)	(N/A)	31.00
Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)	
33.90	28.00	30.26	30.26	
32.90	11.90	15.27	15.37	
12.00	8.00	(N/A)	(N/A)	

Inlet Summary

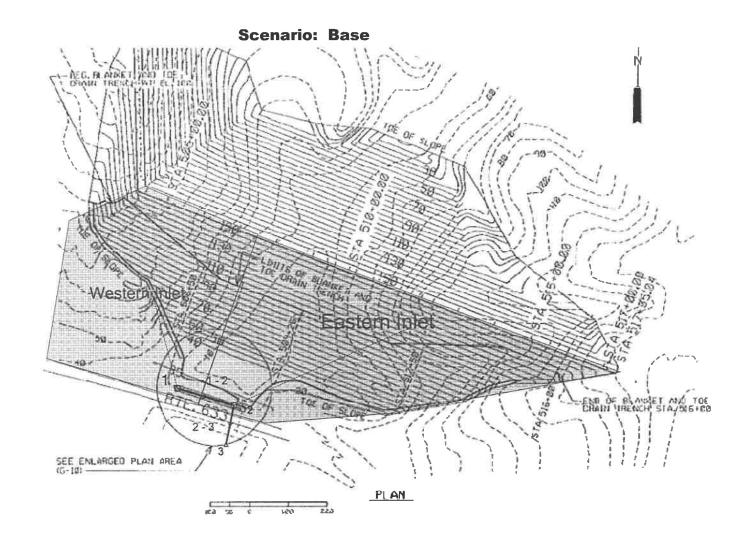
Label	Inlet Type	Catalog Inlet Type	Catalog Inlet	Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14
Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)

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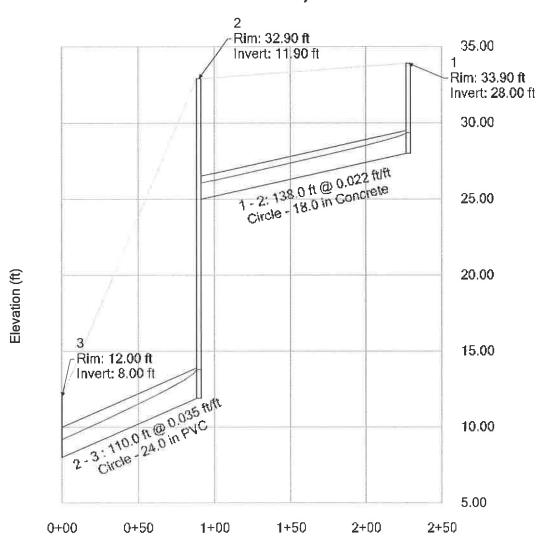
Bentley StormCAD V8i (SELECTseries 3) [08.11.03.84] Page 2 of 3

Pond Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
Hydraulic Grade (ft)	Volume (gal)			



Profile Report Engineering Profile - Profile - 1 (Outfall S107 Design_revised_option 33.stsw)



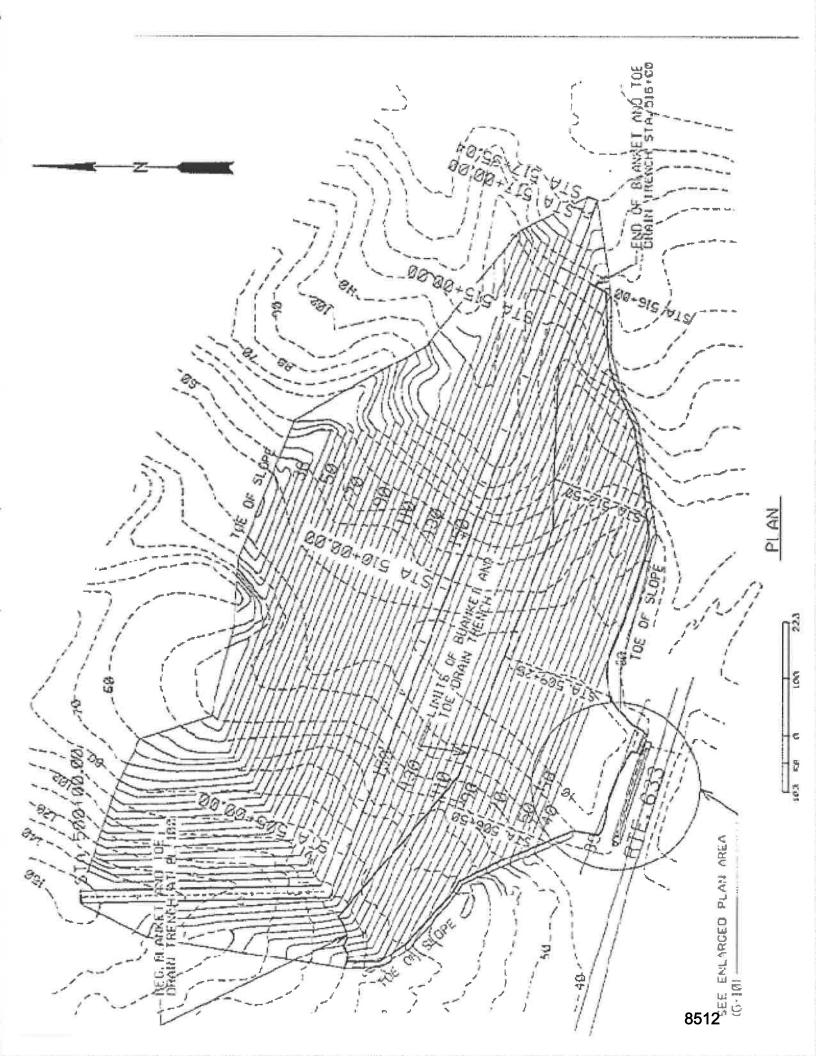
Station (ft)

4/22/2016

SUBJECT	POSSUM F	OINT CCR POND CLC	SURES	10
ST	ORM DRAIN D	ESIGN CALCULATION	NS - OUTFALL S107	14
BY	BULLOBW	DATE 04/18/2016	PROJ. NO. <u>C150132.00</u>	
CHKD. BY	DATE 04	1/19/2016	PAGE 6 of 5	gai consultants

ATTACHMENT 2 POND D CONSTRUCTION DRAWING





SUBJECT	POSSUM P	OINT CCR POND CLC	SURES	(0
STO	ORM DRAIN D	ESIGN CALCULATION	NS - OUTFALL S107	4
BY	BULLOBW	DATE_04/18/2016	PROJ. NO. <u>C150132.00</u>	
CHKD. BY	DATE 04	/19/2016	PAGE 7 of 5	gai consultants

ATTACHMENT 3

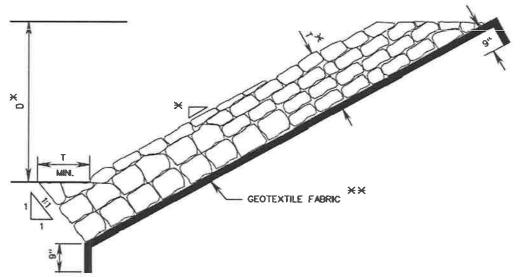
VDOT Standard PG-3 RipRap Ditch Detail



MINIMUM THICKNESS "T"

RIP RAP CLASS	MINIMUM
CLASS AI	20"
CLASS I	26 "
CLASS II	38"
CLASS III	53"

TYPE I RIPRAP DITCH PROTECTION



NOTES:

** RIP RAP BEDDING MATERIAL

GEOTEXTILE FABRIC TO BE PROVIDED UNDER ALL RIPRAP INSTALLATIONS CLASS AI, CLASS I AND CLASS II UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

RIPRAP INSTALLATIONS OF CLASS III SHALL HAVE AN INTERMEDIATE AGGREGATE BEDDING LAYER(S) AS SPECIFIED ON THE PLANS BASED ON GEOTECHNICAL RECOMMENDATIONS.

★ SEE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL AND RIPRAP THICKNESS.

TYPE II RIPRAP SLOPE PROTECTION

VDOT

ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1 RE

109.02

REVISION DATE

STANDARD RIP RAP DITCH & SLOPE PROTECTION PG-3

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

245 414

APPENDIX C Estimate of Probable Construction Cost



Item #	ltem	Units	Quantity	U	nit Cost	- 1	tem Cost
01366	Storm Sewer Pipe 36"	ft	90	\$	150.00	\$	13,500.00
07512	Drop Inlet DI-7B	Ea	1	\$	6,500.00	\$	6,500.0
26127	Dry RipRap Cl. 1 26"	Tons	42	\$	45.00	\$	1,890.0
27500	Geotextile Fabric	SY	60	\$	5.00	\$	300.0
00529	Flowable Backfill	CY	2	\$	230.00	\$	460.0
56200	Trech Excavation	CY	200	\$	25.00	\$	5,000.0
51910	Saw Cut	ft	46	\$	10.00	\$	460.0
24410	Demolition of Pavement	SY	13	\$	10.00	\$	130.0
27552	NS. Aggr. Material, #57 Coarse Aggregrate	Tons	66	\$	50.00	\$	3,300.0
00505	Bedding Matl. Aggr. No. 25 or 26	Tons	40	5	50.00	\$	2,000.0
16224	Aggr. Matl. No. 10	Tons	250	\$	50.00	\$	12,500.0
16242	Bedding Mati. Ty. I or II No. 21A	Tons	9	\$	30.00	\$	270.0
10642	Asphalt Concrete Ty. BM-25.0A	Tons	2	\$	85.00	\$	170.0
10610	Asphalt Concrete Ty. IM-19.0A	Tons	2	\$	85.00	\$	170.0
10635	Asphalt Concrete Ty. SM-9.5A	Tons	2	\$	120.00	\$	240.0
27451	Inlet Protection, Type A	Ea	1	\$	260.00	\$	260.0
13320	Guardrail (Remove & Replace)	Ea	1	\$	1,000.00	\$	1,000.0
24282	Traffic Control	Ea	1	\$	5,000.00	\$	5,000.0
					tal Project Cost	\$	53,150.

Unit Cost as defined by the VDOT Statewide Average Price

Item #	ltem	Units	Quantity	Uı	nit Cost	1	tem Cost
	Modify Existing DI	Ea	1	\$	500.00	\$	500.00
01186	Storm Sewer Pipe 18"	ft	140	\$	70.00	\$	9,800.00
01366	Storm Sewer Pipe 36"	ft	90	\$	150.00	\$	13,500.00
07512	Drop Inlet DI-7B	Ea	1	\$	6,500.00	\$	6,500.00
26127	Dry RipRap Cl. 1 26"	Tons	42	\$	45.00	\$	1,890.00
27500	Geotextile Fabric	SY	60	\$	5.00	\$	300.00
00529	Flowable Backfill	CY	2	\$	230.00	\$	460.00
51910	Saw Cut	ft	46	\$	10.00	\$	460.0
24410	Demolition of Pavement	SY	13	\$	10.00	\$	130.0
27552	NS. Aggr. Material, #57 Coarse Aggregrate	Tons	50	\$	50.00	\$	2,500.00
00505	Bedding Matl. Aggr. No. 25 or 26	Tons	25	S	50.00	\$	1,250.0
16224	Aggr. Matl. No. 10	Tons	150	\$	50.00	\$	7,500.0
16242	Bedding Matl. Ty. I or II No. 21A	Tons	9	\$	30.00	\$	270.0
10642	Asphalt Concrete Ty. BM-25.0A	Tons	2	\$	85.00	\$	170.0
10610	Asphalt Concrete Ty. IM-19.0A	Tons	2	\$	85.00	\$	170.0
10635	Asphalt Concrete Ty. SM-9.5A	Tons	2	\$	120.00	\$	240.0
27451	Inlet Protection, Type A	Ea	1	\$	260.00	\$	260.0
13320	Guardrail (Remove & Replace)	Ea	1	\$	1,000.00	\$	1,000.0
24282	Traffic Control	Ea	1	\$	5,000.00	\$	5,000.0
				Tot	al Project Cost	\$	51,900.0

^{*}Unit Cost as defined by the VDOT Statewide Average Price

Item #	ltem	Units	Quantity	U	nit Cost	tem Cost
01301	Bore & Jack 30" Pipe	ft	110	\$	1,500.00	\$ 165,000.00
01246	Storm Sewer Pipe 24" (Not Pay Item)	ft	110	\$		\$ *
07512	Drop Inlet DI-7B	Ea	1	S	8,200.00	\$ 8,200.00
26127	Dry RipRap Cl. 1 26"	Tons	30	\$	45.00	\$ 1,350.00
27500	Geotextile Fabric	SY	30	\$	5.00	\$ 150.00
00529	Flowable Backfill	CY	2	\$	230.00	\$ 460.00
56200	Pit Excavation - (included with LF cost of B&J)	CY		\$	-	\$ -
				Tot	al Project Cost	\$ 175,160.00

^{*}Unit Cost as defined by the VDOT Statewide Average Price

PP Outfall 010-S107Culvert Replacement Plan (15%) - Cima Comments



DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company Possum Point Power Station Coal Combustion Residual Surface Impoundment Closures Dumfries, Virginia

> GAI Project Number: C150132.00, Task 051 April 2016



COMMUNIS AS NOTOD

4/27/16

Prepared by: GAI Consultants, Inc. Richmond Office 4198 Cox Road, Suite 114 Glen Allen, Virginia 23060 Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016

Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

Prepared by:
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Report Authors:					
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John Klamut					
	Brian Bullock				

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective in January 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of stormwater flows associated with the Ash Pond D closure activities. The purpose of this document is to present Dominion's plan to restore stormwater only flows to the previous outfall associated with the Pond D toe drain, referred to as Outfall 010 or S107. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1.F.23.:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1.A.15, Part I.E and Part I.F.18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dryweather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

3.0 Original System Description

Previous discharges at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by Figure 1 and Figure 2, attached in Appendix A, the storm sewer system is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and



downstream inlets are connected by 18-inch concrete pipe. The system previously discharged through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. However, the 72-inch culvert has been abandoned in place & water captured in the downstream inlet structure is pumped into Pond D. As shown on Figure 1 in Appendix A, the total contributing drainage area for the two inlets is approximately twelve (12) acres. The hydrologic and hydraulic calculations are included in Appendix B.

4.0 Proposed System Description

Three storm drain design options are being provided as a part of this conceptual design plan. Per VDOT design requirements, the proposed system will be designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction-vegetated condition. Pipe installation will be completed in accordance with the VDOT 2008 Road and Bridge Standards. Conducting work inside of the VDOT owned right-of-way will require obtaining the proper VDOT Land Use Permits.

The options will include the installation of a VDOT standard DI-7B inlet (see Figure 5 in Appendix A). The proposed inlet structure will tie into the existing 18-inch storm sewer pipe approximately 30 feet west of the existing drop inlet. The remaining portion of the 18-inch pipe will be abandoned in place by backfilling with flowable fill. Option 1 will include a single barrel crossing consisting of a 36-inch corrugated plastic pipe (CPP) to be installed across Possum Point Road utilizing an open cut method. Option 2 will include replacing the existing 18-inch storm sewer pipe at a shallower depth and installing a single barrel 36-inch CPP pipe crossing Possum Point Road. Option 3 will utilize trenchless technology. A single-barrel crossing allowing for bore and jack installation under Possum Point Road.

4.1 Storm Drain Design - Option 1

WEDING ?

The proposed layout of the Option 1 Storm Drain System is shown on Figure 2 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. Opencut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection Manual. If road closure is necessary, night operations may be required in order to minimize the Impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 10 feet per second (fps). Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will include be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 1 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about \$53,000 (see Appendix C).

4.2 Storm Drain Design - Option 2

The proposed layout of the Option 2 Storm Drain System is shown on Figure 3 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. This option also includes replacing the existing 18-inch storm sewer pipe to reduce the depth of the system. The system will be designed to minimize the amount of cover. This will minimize the cost of and duration of the installation process. It will also minimize the depth of trench excavation required along Possum Point Road. The contractor should locate existing underground utilities along Possum Point Road and determine depths by potholing prior to construction. As with Option 1, open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection



Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 9 fps. Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 2 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 2 Storm Drain System will be about \$52,000 (see Appendix C).

4.3 Storm Drain Design - Option 3

The proposed layout of the Option 3 Storm Drain System is shown on Figure 4 in Appendix A. Option 3 will utilize jack & boring technology to reduce the impact to the roadway. The crossing pipe will consist of a 24-inch diameter conduit, 110 feet in length. A VDOT Land Use Permit is still required when crossing a roadway using trenchless technology. Equipment laydown areas and the boring pit will be located outside the limits of the VDOT right-of-way and if a receiving pit is required, it will be located outside the limits of the wetlands on the downstream end. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 18 fps. Outlet Protection will be designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection is anticipated to be achieved through a riprap energy dissipator. For the purposes of this draft design concept, a detailed design of the energy dissipator has not been completed. After successful installation – the Outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 3 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about \$175,000 (see Appendix C).

- PROS & CONS OF EACH OPTION?
- RECOMMENDATION FIZOM GAT?



- concept is Acceptable, with more information on leng + controls, CUT IN GRATE AND REINFORCE OR - OTHER COMMENTS ARE
FABRICATE NEW GRATE WITH OPENING for the detail design. SUPPORT 2 HeIGHY seaunt gygten 3'-1" THICK 18" HDPE HDPE FLAT /W FLANGE STOCK W/ WATERTIGHT SEAL BUTT **FUSE** ANCHORS-1" THICK HDPE **HDPE** 2' SQ.-PIPE FLAT STOCK TOE DRAIN **OPENING** 18" HDPE FLANGE TEE CONNECTION 8 raned 5 upport design OR COUPLING (ANCHORS-- HOW WILLThe pump contents - ALARMS? - CONTROL MOYLOSD? **SUPPORTS** ANCHOR DEGILN + PATTERN **EXISTING CONCRETE** JUNCTION BOX PUMP-Deglan?,
gize [Head BOLT HOPE PIPE TO FLOOR OF EXISTING CONCRETE BOX USING BLIND FLANGE FOR STABILITY AND BOYANCY $\mathsf{R} \mathsf{A} \mathsf{E}$ DRAWING TITLE GAI DRAWING NUMBER: POND D TOE DRAINAGE SEPARATION (INTERIM SOLUTION) FIGURE 1 GAI FILE NUMBER: C150132-00-054-C-A2-001-SKETCH DRAWN BY: CHECKED BY: APPROVED BY: CLIENT SHEET NO .: SCALE: ISSUE DATE: NOT TO SCALE 1/21/2016 gai consultants

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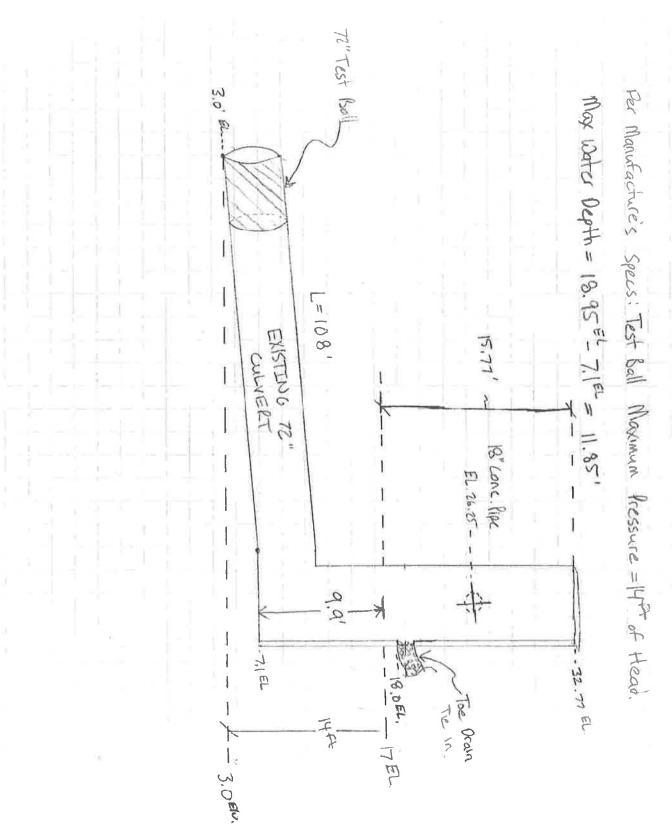
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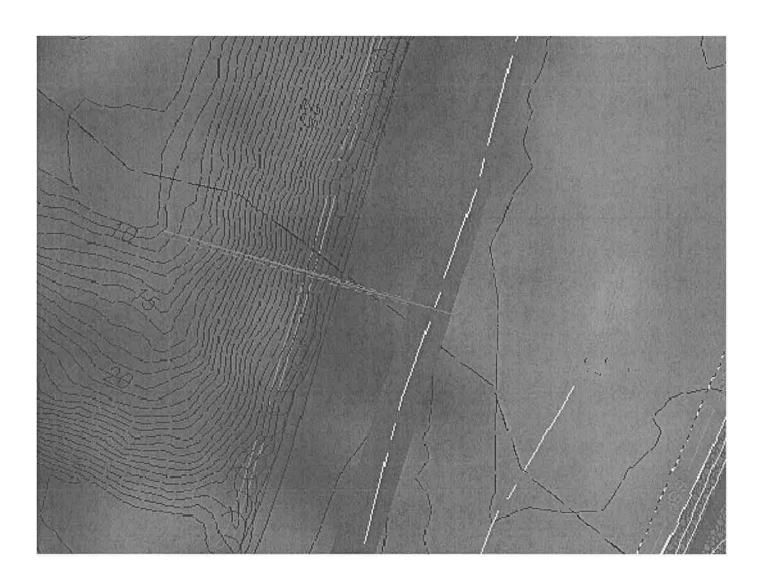
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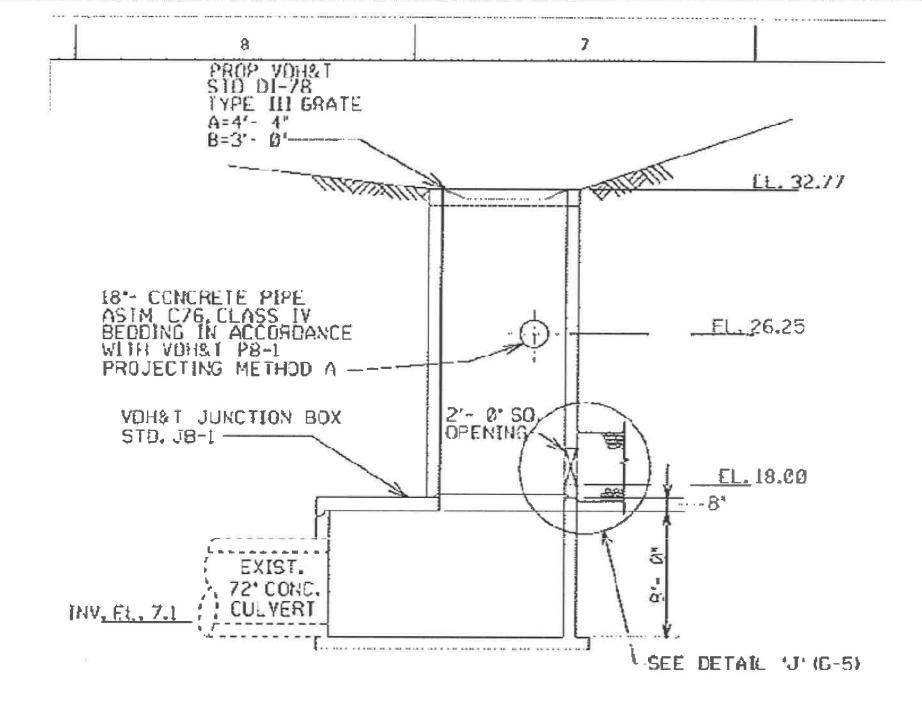
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gai consultants

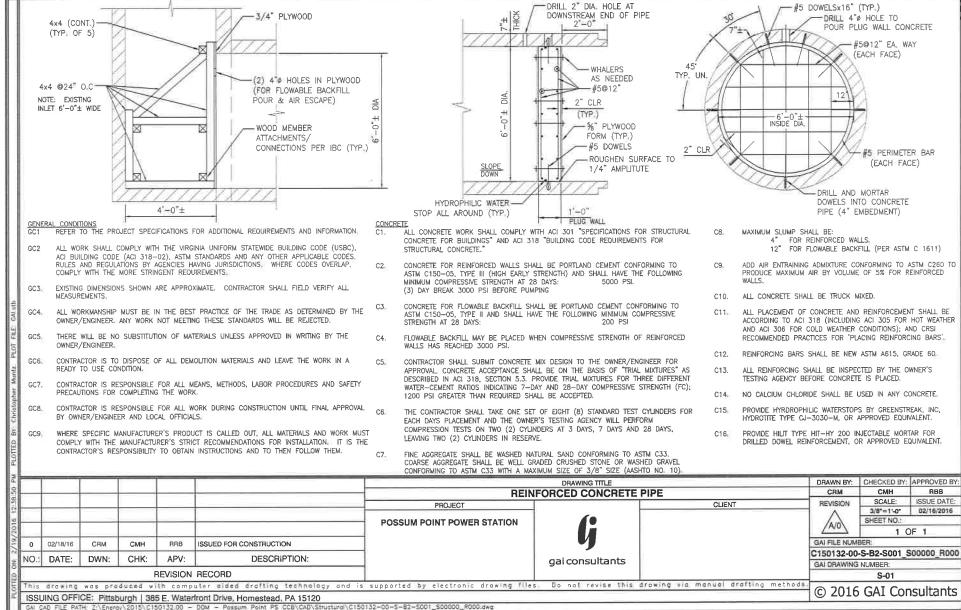




Part	Nominal	Usage	Maxi		Inflation	Product	Deflated	Deflated	Inflation	Chain /
Number	Size	Range	Back Pi		Pressure	Weight	Length	Diameter	Thread	Eye bolts
310728	48 - 72" (1200-1800 mm)	44"-72.25" (1118-1835 mm)	6 psi (0,41 bar)	14 ft. (4.3 M)	12 psi (0,83 bar)	290 lbs (132 kg)	100" (2540 mm)	43" (1092 mm)	1/2" (2)	3/4" (3)



SECTION H - H (H-9)





Outfalls 010, 503 (Interim/Final), and 005 (Interim Discharge from Pond E Holding Basin) Sampling Plan

Virginia Electric and Power Company d/b/a Dominion Virginia Power Coal Combustion Residuals Pond Closure Project Possum Point Power Station Prince William County, Virginia

GAI Project Number: C150132.00, Task 050

December 2015



Prepared by: GAI Consultants, Inc. Richmond Office 4198 Cox Road, Suite 114 Glen Allen, Virginia 23060-3328 Prepared for: Virginia Electric and Power Company d/b/a Dominion Virginia Power 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

Outfalls 010, 503 (Interim/Final), and 005 (Interim Discharge from Pond E Holding Basin) Sampling Plan

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5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

Prepared by:
GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060-3328

Report Authors:

John D. DeBarbieri, P.E. Senior Project Engineer

John R. Klamut, PE, CFM Engineering Manager

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1.0 Project Overview

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) (ash) ponds at the Possum Point Power Station (Station), an 1,845 megawatt, natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.1 Introduction

Dominion is currently working to close five existing ash ponds at the Station. The five ponds are designated A, B, C, D and E. Ponds A, B, and C were originally three contiguous ponds that have been inactive since the 1960s. All five ponds are scheduled for closure by April 2018 in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Ash Pond E has been decanted, dewatered, and is presently being dredged, all in accordance with applicable state and local requirements. The dredged ash materials and contact/pore waters are being relocated to Ash Pond D for storage. Ash Pond E will then be clean-closed and regraded. Ash Ponds A, B, and C are being dewatered, dredged, and clean-closed. The dredged ash materials and contact/pore waters are in the process of being relocated to Ash Pond D for storage. Following transfer of the dredged ash materials and associated waters from A, B, C and E, the remaining surface water in Ash Pond D will be decanted and the ash will be dewatered so that it can be regraded. Ash Pond D will then be capped and closed. A single regulated solid waste facility for the Station's ash will be maintained at closed Ash Pond D subject to all applicable state closure and post-closure care requirements.

1.2 Project Description

This Sampling Plan addresses the procedures for sampling and analyzing water qualities for the following in accordance with the draft VA Pollutant Discharge Elimination System (VPDES) Permit VA0002071 and Program Fact Sheet for the Possum Point Station issued by the VA Department of Environmental Quality for public comment from October 30, 2015 through December 14, 2015:

- Four-hour and 24-hour flow paced sampling and analyses of discharged waters from Outfall 503 (Interim Configuration/Final Configuration);
- Four-hour and 24-hour flow paced sampling and analysis of discharged waters from Outfall 005 (Interim Discharge from Pond E Holding Basin); and
- Grab sampling and analysis of discharged water from Outfall 010 (Pond D Toe Drain).

Discharged waters from Outfall 503 (Interim Configuration) consist of comingled process water in Pond D (Pond D Comingled Water) as well as Ash Dewatering Water, and stormwater in contact with ash (Contact Water) from the closure activities of Ash Ponds A, B, C, D, and E. Pond D Comingled Water consists of a combination of stormwater as well as the following waters that have been comingled in Pond D as a result of the closure activities of Ash Ponds A, B, C, D, and E:

- Ash Dewatering Water;
- Contact Water;
- Metals cleaning waste (Outfall 501 Water); and
- Oil water (Outfall 502 Water).

Pond D Comingled Water must be drained from Pond D to allow for the closure of Ash Pond D. Pond D Comingled Water includes at least 145 million gallons that has accumulated in Pond D.

Discharged waters from Outfall 503 (Final Configuration) consist of Pond D Passive Underdrainage which refers to future subsurface waters draining from closed and capped Pond D soil/ash below the impermeable liner. These waters are expected to reduce over time and eventually stop flowing.

Discharged waters from Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) consist of decanted Pond D Comingled Water, Ash Dewatering Water, and/or Contact Water from the closure activities of Ash Ponds A, B, C, D, and E. These waters have been filtered for ash particulates and stored in a temporary holding basin within repurposed Pond E prior to discharge. Discharge of the waters are to one or more of the following Outfalls: 005, 001/002, 004.

Discharge waters from Outfall 010 consists of Toe Drainage from the existing dam for Pond D.

2.0 Monitoring Objectives

A draft VPDES Permit for Industrial Wastewater Discharges (Permit) has been issued to Dominion in October 2015. The draft Permit requires limits on Outfall 503 (Interim and Final Configurations) and discharged waters from Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) prior to discharging to one of four potential Outfalls: 001/002, 004, and 005. The limits for Outfall 503 (Interim / Final) and Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) are in the Draft Permit and are attached in Appendices A and B, respectively. Sampling at Outfall 010 (Pond D Toe Drain) is for monitoring purposes to compare with quantification levels. The constituents being monitored at Outfall 010 are in the Draft Permit and are attached in Appendix C.

3.0 Sampling Locations

GAI Consultants, Inc. (GAI) proposed to collect water samples at the approximate locations defined in Table 1 and per the attached "Drawing C150132.00 Sample Locations - Water Sampling Location Map," or in alternate equivalent locations, e.g., upstream on the conveyance pipeline that discharges to respective Outfall. The proposed sample locations, discharge sources, treatment, average flow, and coordinates (latitude and longitude) are as follows:

		•		
Outfall	Discharge Sources	Treatment	Avg. Flow	Latitude Iongitude
005 Ash Pond E (Interim Configuration Discharge from Holding Basin)	Ash Pond Comingled Process Water Discharge (Internal Outfall 503)	Technology to be determined	0.98 MGD	38° 33′ 6.89″ N 77° 17′ 36.8″ W
503 (Interim Configuration)	Comingled Process Water or its Individual Sources	Technology to be determined	2.53 MGD	Location to be determined
503 (Final Configuration)	Closed Pond D Passive Underdrainage	Technology to be determined	2.53 MGD	Location to be determined
010	Ash Pond D Toe Drain	Monitoring required only	Variable	38° 32' 48.8718" N, -77° 17' 10.7838" W

Table 1
Outfall Sample Locations

4.0 Frequency of Sampling

Grab samples are proposed to be collected once a week or once a month as required at Outfall 010 per the approved VPDES Permit. Four-hour and 24-hour composite flow proportioned samples are proposed to be collected once a week or once a month as required at Outfall 503 (Interim and Final

Configurations) and Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) per the approved VPDES Permit. The frequency of sampling each constituent at each outfall is proposed as follows based on the Draft VPDES Permit:

Table 2
Outfall Sampling Frequency

	BELLINE COLLEGE	Outfall	WE WALLED AND THE STREET
Constituent	503 (Interim/ Final)	005 (Interim Holding Basin)	010
	Weekly Grab	Weekly Grab	And the second
pH			Monthly Grab
Specific Conductivity	N/A	N/A	NI/A
Total Suspended Solids	Weekly 4H-C	Weekly 4H-C	N/A
Total Solids	N/A	N/A	Monthly Grab
Chloride	Weekly 4H-C	Weekly 4H-C	,
Fluoride		N/A	
Nitrate and Nitrite, as N		Weekly 4H-C	N/A
Total Nitrogen		Weekly Calculated	IN/A
Phenol	N/A		
Potassium		NI/A	Monthly Grab
Sodium		N/A	IVIOLITING GLAD
Sulfate			
Oils and Grease			
Antimony, Total			
Arsenic, Total			
Cadmium, Total			
Chromium, Total			
Chromium III, Total			
Copper, Total			
Hardness, Total (as CaCO ₃)	Weekly 4H-C	Weekly 4H-C	N/A
Lead, Total	vveekiy 4n-C	vveekiy 4n-C	IN/A
Mercury, Total			
Nickel, Total			
Selenium, Total			
Silver, Total			
Thallium, Total			
Zinc, Total			
Chromium VI, Total			
Antimony, Dissolved			
Arsenic, Dissolved			
Barium, Dissolved			
Cadmium, Dissolved			
Copper, Dissolved			
Iron, Dissolved			
Lead, Dissolved			
Manganese, Dissolved	N/A	N/A	Monthly Grab
Mercury, Dissolved			
Nickel, Dissolved			
Selenium, Dissolved			
Silver, Dissolved			
Thallium, Dissolved			
Vanadium, Dissolved			
Zinc, Dissolved			

Constituent	503 (Interim/ Final)	Outfall 005 (Interim Holding Basin)	010
48-hr Static Acute Toxicity test using Ceriodaphnia dubia 48-hr Static Acute Toxicity test using Pimephales promelas Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia Chronic 7-Day Static Renewal Survival and Growth Test using Pimephales promelas	Monthly 24H-C	Monthly 24H-C	N/A
Total Kjeldahl Nitrogen Ammonia, as N Total Phosphorus	N/A	Weekly 4H-C	
Total Organic Carbon	AFT	N/A	Monthly Grab
NOTES:	AFI		

NOTES:

- 1. N / A = Not Applicable.
- Weekly 4H-C = weekly 4-hour composite flow proportioned sampling.
- 3. Monthly 24H-C = monthly 24-hour composite flow proportioned sampling.

5.0 **Field Sampling Procedures**

GAI is utilizing the analytical services of Air Water & Soil Laboratories, Inc. (AW&SL) located in Richmond, VA for all constituents except for biological/toxicity testing. Coastal Bioanalysts, Inc. (CB) located in Gloucester, VA will perform the biological/toxicity tests. Plastic bottles, labels, and coolers will be shipped to GAI's Richmond, VA office from both labs. GAI employees, Ms. Allison McCurdy and Ms. Sarah Jennings will complete the labels before arriving onsite at the Station. Additionally, the sampling activities will be coordinated in advance with Dominion representatives.

A battery operated peristaltic pump with silicon pump head and low density polyethylene (LDPE) tubing will be used to draw samples. The LDPE tubing will be pre-cut and labeled for each sample and used once to avoid cross contamination. A stainless steel weight will be secured onto the inlet side of the tubing to draw water at the pre-measured depth. Dissolved metal samples will be filtered using the peristaltic pump, tubing, and a disposable Quick Filter prior to preservation. Nitrile gloves, steel-toed boots, hard hats, and eye protection will be worn in accordance with Dominion property regulations for personal protective equipment and GAI Corporate Health and Safety Standards. A Health and Safety Plan will be developed for the sampling activities and approved by the Project Manager and Corporate Health and Safety Manager prior to arriving at the site. Sampling activities will be coordinated in advance with Dominion personnel and the AW&SL and CB representatives will courier the samples to the lab. Chain of custody forms will be completed before delivering the sample bottles/coolers to the courier.

An Isco 6712, full-size, portable flow paced sampler (flow paced sampler) or equivalent will be used at Outfalls 503 (Interim/Final) and 005 (Interim Discharge from Pond E Holding Basin) for weekly continuous four-hour flow proportional composite sampling and monthly continuous 24-hour flow proportional composite sampling. All water collected from the flow paced sampler in the four-hour or 24-hour duration, as applicable, will be blended in a single container to draw samples for analysis. A

3/8-inch inside diameter by 25-foot-long polytetrafluoroethylene suction line with standard weighted polypropylene strainer will connect the sampling point to the flow paced sampler pump intake. Should anticipated line pressure of the Outfall pipe exceed the pump manufacturer's requirements, a pressure reducing valve shall be installed and calibrated on the sample point prior to connecting the suction line. A clamp-on Proline Prosonic flow meter model 91W will be utilized to measure the flow through the Outfall pipe and will send a four- to 20-milliamp signal to a 780 analog module to be analyzed and sent to the flow paced sampler for flow proportioned composite sampling. A single four-gallon polyethylene bottle would be used for collection by the flow paced sampler. A return line with isolation valve to discharge remaining waters leftover from the four-gallon bottle (after drawing samples for analysis) can be coordinated with the Contractor and installed. GAI anticipates that a peristaltic pump can be used to empty the four-gallon bottle after each sampling event via the return line. A 12 VDC source, deep-cycle marine battery will be used to power the flow paced sampler. Guidance documents on how to install the portable sampler, install the suction line, program the sampler to take continuous flow proportional samples and grab samples, etc. are in the Appendices. A trained manufacturer's representative shall be employed during initial installation and startup in advance of the sampling activities. Final equipment shall be selected and coordinated with the Station's contractor prior to placing an order.

6.0 Analytical Testing Summary

GAI will field measure and record pH for each sample. AWS&L will analyze all constituents in Table 3 except for biological/toxicity testing which is to be performed by CB.

Table 3
Parameters for Analysis

Constituent	No. of Bottles per Sample ID	Preservant	Hold Time	Analytical Method
Chloride	per Sample 10	Fiesei valit	28 days	EPA 300.0
Fluoride	-		28 days	EPA 300.0
pH			15 minutes	S4500HB-00
Specific Conductivity	(1) – 1 L plastic	<6 ℃	28 Days	S2510B-97
Sulfate			28 Days	EPA 300.0
Total Solids			7 Days	SM2450B
Total Suspended Solids	(1) – 1 L plastic	<6 °C	7 days	S2540D-11
Phenol	(1) – 1 L amber + MS/MSD for every batch of 20 samples	<6 °C	7 days	EPA 625
Oils and Grease	(2) – 1 L amber	HCI	28 days	EPA 1664B
Antimony, Total				EPA 200.8
Arsenic, Total				EPA 200.8
Cadmium, Total	(1) 500			EPA 200.8
Chromium, Total	(1) – 500 mL plastic	HNO₃	6 months	EPA 200.8
Chromium III, Total	piastic			Calculation
Copper, Total				EPA 200.8
Hardness, Total (as CaCO ₃)				EPA 200.7
Lead, Total	(1) 500 mal			EPA 200.8
Mercury, Total	(1) – 500 mL plastic	HNO ₃	6 months	EPA 245.1
Nickel, Total	Piastic			EPA 200.8

Table 3 (Continued)

	Table 3 (Colli	inacuj		
Constituent	No. of Bottles per Sample ID	Preservant	Hold Time	Analytical Method
Potassium				EPA 200.7
Selenium, Total				EPA 200.8
Silver, Total	(1) – 500 mL	HNO₃	C	EPA 200.8
Sodium	plastic		6 months	EPA 200.7
Thallium, Total				EPA 200.8
Zinc, Total				EPA 200.8
Chromium VI, Total	(1) – 500 mL plastic	<6 °C	24 hours	SM3500-Cr B
Antimony, Dissolved ¹				EPA 200.8
Arsenic, Dissolved ¹				EPA 200.8
Barium, Dissolved ¹	,,, ,			EPA 200.8
Cadmium, Dissolved ¹	(1) – 500 mL plastic	HNO ₃	6 months	EPA 200.8
Copper, Dissolved ¹	plastic			EPA 200.8
Iron, Dissolved ¹		ı		EPA 200.7
Lead, Dissolved ¹				EPA 200.8
Manganese, Dissolved ¹				EPA 200.8
Mercury, Dissolved ¹				EPA 245.1
Nickel, Dissolved ¹				EPA 200.8
Selenium, Dissolved ¹				EPA 200.8
Silver, Dissolved ¹				EPA 200.8
Thallium, Dissolved ¹				EPA 200.8
Vanadium, Dissolved ¹				EPA 200.8
Zinc, Dissolved ¹				EPA 200.8
48-hr Static Acute Toxicity test using Ceriodaphnia dubia	(1) 1 gal plactic	N/A	36 hours	40 CFR 136.3 EPA 2002.0
48-hr Static Acute Toxicity test using Pimephales promelas	(1) - 1 gal plastic	N/A	36 hours	40 CFR 136.3 EPA 2000.0
Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia	(2-6) – 1 gal	N / A	36 hours	40 CFR 136.3 EPA 1002.0
Chronic 7-Day Static Renewal Survival and Growth Test using <i>Pimephales promelas</i>	plastic	N / A	36 hours	40 CFR 136.3 EPA 1000.0
Total Nitrogen	(1) – 250 mL plastic	H₂SO₄	28 days	Calculation
Ammonia, as N				EPA 350.1
Nitrate and Nitrite, as N	(1) – 250 mL	H₂SO₄	28 days	D6919-09
Total Kjeldahl Nitrogen	plastic	112304	20 days	S4500NH3G-11
Total Phosphorus				SM4500-P E
Total Organic Carbon	(2) – 40 mL amber VOA vials	H₂SO₄	28 days	SM5310C

NOTES:

- 1. Samples for dissolved constituent analyses will be filtered in the field prior to preservation.
- 2. N / A = Not Applicable.
- 3. VOA = Volatile Organic Analysis.

7.0 Proposed Schedule

GAI proposes the following schedule to stage the various samples at the respective outfalls. Should Outfalls 503 (Interim Configuration) and 005 (Interim Discharge from Pond E Holding Basin) discharge simultaneously, a flow paced sampler will be required at each outfall, respectively:

Table 4
Parameters for Analysis

Sample Days (when Monthly / Weekly Sample Events Overlap)	503 (Interim/ Final)	005 (Interim Holding Basin)	010
Monday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly Grab samples for required monitoring parameters
Tuesday	Monthly 24-hr Acute Biological / Toxicity Sample	Monthly 24-hr Acute Biological / Toxicity Sample	N / A
Wednesday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	N / A
Thursday	Weekly 4-hr composite sampling for Metals and remaining parameters	Weekly 4-hr composite sampling for Metals and remaining parameters	N / A
Friday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	N / A

NOTES:

- 1. N / A = Not Applicable.
- 2. Three days of samples are required for each Chronic Biological / Toxicity test.

APPENDIX A
Outfall 503 (Interim/Final) Draft Permit Discharge
Monitoring / Limits



APPENDIX B Outfall 005 (Interim Discharge from Pond E Holding Basin) Draft Permit Discharge Monitoring / Limits



APPENDIX C
Outfall 010 (Pond D Toe Drain) Draft Permit Discharge
Monitoring



APPENDIX D Sampler Installation Instructions



APPENDIX E Proline Prosonic Flow Meter Technical Information



APPENDIX F Suction Line Installation Instructions



APPENDIX G
Flow Paced Sampling Programming Instructions



APPENDIX H
Grab Sample Programming Instructions





BY CERTIFIED MAIL RETURN RECEIPT REQUESTED

October 21, 2015

Ms. Susan D. Mackert
Environmental Specialist II
Virginia Department of Environmental Quality - Northern Regional Office
13901 Crown Court,
Woodbridge, VA 22193

Re: <u>Dominion - Possum Point Power Station VPDES Permit No. VA0002071</u> <u>Permit Modification Request - Addendum</u>

Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two storm water outfalls S107 and S108. Both outfalls receive stormwater from ash handling areas associated with the closure of Possum Point Power Station's ash ponds.

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 or Jeff Marcell at (703) 609-3813.

Sincerely,

Cathy C. Taylor

Director, Electric Environmental Services

Enclosures

Mrs. Mackert October 21, 2015

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: David A. Craymer

OFFICIAL TITLE: V.P. Power Generation System Operations

PHONE NO: (804) 273-3685

SIGNATURE: And Congression DATE SIGNED: 10/21/15

Mrs. Mackert October 21, 2015

Please scan signed original + attachments and rename file as:
PP 2015 10-22 VPDES Permit Modification Request-Addendum

Please send renamed scanned document to:

David Craymer
Pam Faggert
Sidney Bragg
Cathy Taylor
Jason E. Williams
Jeffrey Heffelman
Jeff Marcell
Ken Roller
Oula Shehab-Dandan
Ian Whitlock
Clay Burns

Documentum: Possum Point P.S. / Water - NPDES / Permit-Applications

EPA ID Number (copy from item 1 of Form 1) 110000340774

Form Approved, OM3 No. 2010-0086

Form

2F **NPDES**



United States Environmental Protection Agency Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)	I	B. Latitud	le	C	. Longitud	le	D. Receiving Water (name)
S107	38	32	43.8	77	16	37	Quantico Creek
\$108	38	32	52	77	17	21	Unnamed Tributary to Quantico Creek
		1					
70.71	-						A 12 1 1 2 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1
					o as		(Co. 1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
		lares -					

II. Improvements

Are you now required by any federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or losn conditions

Identification of Conditions,		2. Affected Outfalls			inal nce Date
Agreements, Etc.	number	source of discharge	3. Brief Description of Project	а. гед.	ъ, ргој.
CCR Rule 40 CFR Part 257, Subpart D	S107 S108	Stormwater Associated with Industrial Activity	Closure of the station's existing, inactive ash ponds.	04/18/15	04/18/15
			2.		
			A STATE OF THE STA		
180000					
11.02.		TANKS TO THE TOTAL OF THE TANKS		-1) 12000 mg	

You may attack additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unovailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where posticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive sterm water discharges from the facility.

Continued fr	on the Front					
IV. Narr	ative Description of Pollat	ant Sources				
	each outfall, provide an estimate of the		ious surfaces (i	noluding paved areas and build	ing roofs	drained to the cutfall,
	an estimate of the total surface area dr	ained by the outfall.		VALUE OF THE PARTY		
Outfall	Area of Impervious Surface	Total Area Drained	Outfall	Area of Impervious Surface		Total Area Drained
Number	(provide units)	(provide units)	Number	(provide units)		(provide units)
S107	0 acres	14.4 acres				
S108	0.4 acres	0.76 acres	1		- }	
	1					
allov cont herb	vide a narrative description of signification of signification of signification water; method cact by these materials with storm waterleides, soil conditioners, and fertilizers of collects storm water from the	of treatment, storage, or disposer runoff, materials loading and sare applied.	sal; past and pa id access areas	resent materials management p ; and the location, manner, and	ractices of trequence	employed to minimize by in which pesticides,
	r outfall in the existing permit,					
	o collects groundwater infiltrat				area is	approximately 14.
acres, con	sists of grass and vegetative slo	opes, and is considered to	be 100% p	ervious.		
This outfa ash sluice the constru The drains stormwate Given the outfalls as cease and	08 is a new storm water outfal ill is located at the point of con lines. The drainage area association entrance. The drainage age areas for Outfalls \$107 and or contributing to these cutfalls location of these drainage area sociated with industrial activity only construction activities correas for \$107 and \$108.	vergence for runoff from that is approximately 0.7 is \$108 are located in closs may be impacted by ash is Dominion is requestingly. As the pond closure present in the state of the state o	a VDOT cull receive run 6 acres and e proximity managemen that Outfal roject progre	nivert and the culverts connoff from the area south of consists of approximately to the station's ash ponds at activities associated with 18 \$107 and \$108 be permesses ash management activities.	taining of Pond / 95% p Cons h the ponitted as ivities with the ponit with the ponitted as ivities with the ponitted as ivities wit	the station's forme E and located near pervious surfaces. equently, ond closure projects sform water will eventually
Dominion	has implemented BMPs in the	drainage areas contributi	ing to Outfa	He S107 and S108 includi	na grae	ling of hand roads
	ation of straw bales and silt fen					
	e with the VPDES individual p					
			monporate	DIVIES, to minimize the I	mpacre	n asii management
activities	hat may occur with the associa	ited drainage areas,				
C For	and aufall securds the leastion and	a description of spiriting street	treat and page	trustural control managements to to	اد محمداد	lutanta in otama matan
	each outfall, provide the location and off; and a description of the treatment t					
	the ultimate disposal of any solid or fla					
Outfall			10,7			List Codes from
Number		Treatment				Table 2F-1
S107	Discharge to Surface Water					4-A
S108						
V Non S	tornivator Discharges					
	tormwater Discharges Lify under penalty of law that the outfa	olico) covered by this mediantle	n house bonn too	ted or auditated for the amoone	0.01, 4042	tomustar discharge
	that all nonstormwater discharges from					
	icial Title (type or print)	Signature			Date Sig	
David A. C	A COLUMN TO THE	0	10		wa gratikatali 👭	, ,
	Generation System Operations	Nan	100	ang -	10	121/15
	ide a description of the method used, t	he date of any testing, and the c	onsite dramage	points that were directly observ	ed during	n test.

Outfall S107- There is a continuous discharge from this outfall due to groundwater contribution. This outfall will be inspected for non-storm water flows.

Outfall \$108 - This outfall discharges primarily during rain events. This outfall will be inspected for non-storm water flows.

VI. Significant Leaks or Spills	* * * * * * * * * * * * * * * * * * * *
Provide existing information regarding the history of significant leaks or spills of toxic or hat the approximate date and location of the spill or leak, and the type and amount of material rel	
No spills or leaks of toxic or hazardous pollutants have occurred within the la	
with S107. On August 6, 2015, pump failure resulted in the overflow of an U	unknown volume of wastewater from a temporary
water storage tank that was collecting groundwater and the effluent from the	station's internal Outfall 502. The overflow event,
which occurred within the drainage area for \$108 is described in and On Se	
excessive stormwater runoff within the drainage area contributing to Outfall	
volume of coal ash, overwhelmed existing BMPs and was discharged via S10	08. The discharge and follow-up actions are
described in an October 5, 2015 letter to DEQ.	7 7
VII. Discharge Information	
A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. A Tables Vii-A, VII-B, and VII-C are included on separate sheets numbered VII-I	and VII-2.
E. Potential discharges not covered by ann'ysis - is any toxic pollutant listed in table 2F-2, 2 you currently use or manufacture as an intermediate or final product or byproduct?	
Yes (list all such pollutants helaw)	No (go to Section IX)
No analytical data exist for either stormwater outfall \$107 or \$108. The indu	
for these outfalls consists of the management of coal combustion residual (e.	g., fly ash) that was generated during periods when
the station burned coal to generate electricity. These types of activities, and	associated pollutants, were considered during the
development of Sector O requirements included in EPA's and Virginia's Indiconditions have been incorporated into Possum Point's individual VPDES pa	
conditions have been incorporated into rossum rount's individual VPDES pa	aringe.
	1
	1
VIII. Biological Toxicity Testing Data	
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox	ricity has been made on any of your discharges or on a receiving
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years?	
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox	ricity has been made on any of your discharges of on a receiving No (go to Section 1%)
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years?	
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Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years? Yes (list ail such pollutants below)	
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years? Yes (list ail such pollutants below) IX. Contact analysis Information	No (go to Section IX)
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years? Yes (last ail such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performed by a contact laboratory or consulting fi	No (go to Section IX)
Do you have any knowledge or reason to believe that any biological test for acute or chronic tox water in relation to your discharge within the last 3 years? Yes (list ail such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performed by a contact laboratory or consulting fill yes (list the name, address, and telephone number of, and pollutants	No (go to Section IX)
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Continued from Page 3

EPA ID Number (copy from Item I of Form I)

110000340774

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or prim)

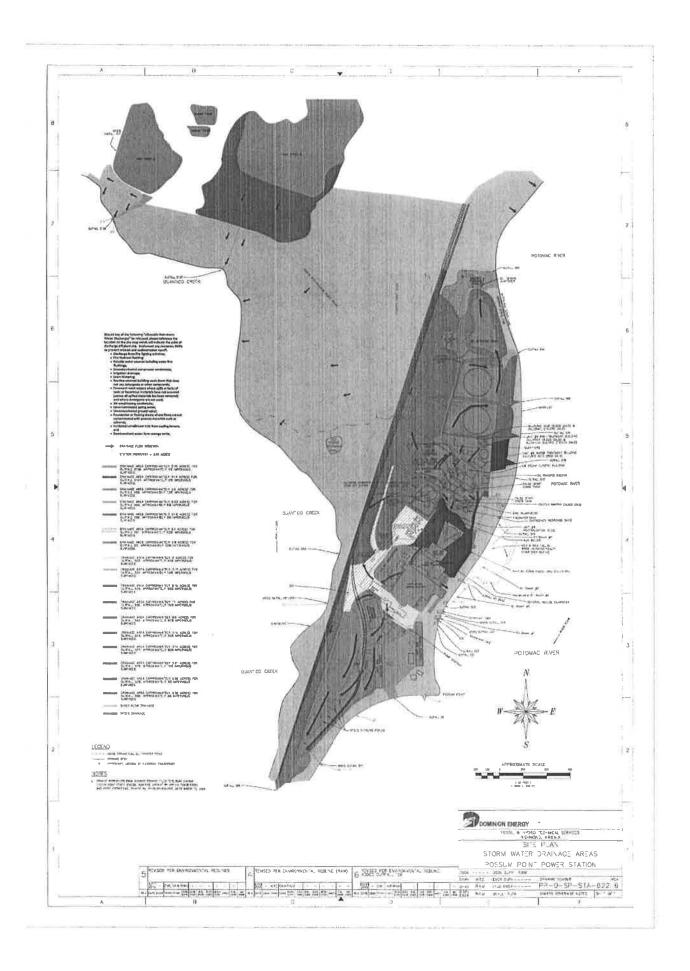
David A. Craymer

VP Power Generation System Operations

C. Signature

B. Area Code and Phone No.

(804) 273-3685



BY CERTIFIED MAIL RETURN RECEIPT REQUESTED

October 22, 2015

Ms. Susan D. Mackert Environmental Specialist II Virginia Department of Environmental Quality - Northern Regional Office 13901 Crown Court, Woodbridge, VA 22193

Re: <u>Dominion – Possum Point Power Station VPDES Permit No. VA0002071</u> <u>Permit Modification Request - Addendum</u>

Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two storm water outfalls S107 and S108. Both outfalls receive stormwater from ash handling areas associated with the closure of Possum Point Power Station's ash ponds.

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 or Jeff Marcell at (703) 609-3813.

Sincerely,

Cathy C. Taylor Director, Electric Environmental Services

Enclosures

Mrs. Mackert October 22, 2015 Page 2

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: <u>David A. Craymer</u>
OFFICIAL TITLE: <u>V.P. Power Generation System Operations</u>
PHONE NO: <u>(804) 273-3685</u>
SIGNATURE:
DATE SIGNED:

Mrs. Mackert October 22, 2015 Page 3

Please scan signed original + attachments and rename file as:

PP 2015 10-22 VPDES Permit Modification Request-Addendum

Please send renamed scanned document to:

David Craymer

Pam Faggert

Sidney Bragg

Cathy Taylor

Jason E. Williams

Jeffrey Heffelman

Jeff Marcell

Ken Roller

Oula Shehab-Dandan

Ian Whitlock

Documentum: Possum Point P.S. / Water – NPDES / Permit-Applications

Mrs. Mackert November 25, 2013

BY CERTIFIED MAIL RETURN RECEIPT REQUESTED

October 21, 2015

Ms. Susan D. Mackert Environmental Specialist II Virginia Department of Environmental Quality - Northern Regional Office 13901 Crown Court, Woodbridge, VA 22193

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Clay Burns

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October 22, 2015

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Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two one new industrial storm water outfalls (S1078) and modification of an existing industrial outfall (S108. Both outfalls receive stormwater from ash handling areas 7). We are requesting that permit condition LA.12 be modified to recognize that industrially influenced storm water may be discharged through existing storm water outfall S107. Storm water runoff from industrial activities associated with ash handling activities associated with the closure of Possum Point Power Station's ash ponds. located outside the ash ponds is represented by Outfalls S107 and S108. Outfall S107 collects storm water from the berm of Ash Pond D which discharges southeast of Pond D. Outfall S108 receives runoff from the area south of Pond E and near the construction entrance. In addition, we are providing information to supplement Attachment A of the Form 2F that was submitted with our earlier application, and we are also including proposed changes to a number of permit conditions for clarification.

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 and/or Jeff Marcell at (703) 609-3813.

Sincerely,

Mrs. Mackert October 22, 2015 Page 2

Cathy C. Taylor Director, Electric Environmental Services

Enclosures

Mrs. Mackert October 22, 2015 Page 3

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Mrs. Mackert October 22, 2015 Page 4

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Ian Whitlock

Documentum: Possum Point P.S. / Water - NPDES / Permit-Applications

Mrs. Mackert November 25, 2013

MEMO

Date:	February 10, 2016
Project No.	C150132.00
То:	Kenneth Roller, Dominion
From:	Scott Quinlan, GAI Consultants, Inc.
cc:	John Klamut, GAI Consultants, Inc.
Subject:	Possum Point Outfall 010

Kenneth,

Pursuant to our meeting with the Virginia Department of Environmental Quality (VaDEQ) on Wednesday, February 3rd, 2016, this serves as an overview of the plan for <u>eliminating the discharge from plugging</u> Outfall 010. Outfall 010 is located south of Pond D across Possum Point Road (see attached Figures 1 and 2).

The modified Virginia Pollutant Discharge Elimination System (VPDES) Permit allows for the redirection of Outfall 010 flows to Ash Pond D. Dominion is proposing to redirect Outfall 010 waters to Pond D with the use of inflatable plugs and sump pumps as an interim solution. This interim solution work is planned to be completed by February 12, 2016 and is expected to remain in place until a permanent solution is designed and permitted. The permanent solution will serve the purpose of separating Pond D Toe Drainage from Outfall 010 in accordance with the Permit Special Conditions in Part 1.F.23.

As a result of the work this week to install the inflatable plugs and sump pumps, Dominion has collected samples of the Outfall 010 discharges to allow for reporting of the monthly compliance monitoring in February. Manual flow paced sampling of Outfall 010 discharges began on February 7th and were completed on February 8th. Due to the limited availability of sampling throughout this week, Dominion is able to report all constituents in the modified VPDES permit except chronic toxicity. This is due to the fact that 3 samples are required over a 5 day period and the outfall will be plugged prior to being able to obtain the additional samples.

The interim solution includes the installation of dual submersible pumps in the existing inlet north of Possum Point Road (Refer to Figure 3). This inlet is upstream of the 72" reinforced concrete culvert that crosses the road and of which the downstream discharge is Outfall 010. The 72" culvert will be plugged on the upstream and downstream ends. Additional earth fill will be added at the outfall to contain the plug. A block and mortar bulkhead may be added prior to the upstream plug at the existing inlet at a later date. Thus, stormwater, groundwater, and the Pond D Toe Drain age can will be isolated and collected in the existing inlet and redirected (pumped) to Pond D. Note each proposed submersible pump is rated at 500-gpm and operates with level floats on a lead-lag basis. Thus, the estimated 1-yr, 24-hr duration peak runoff rate will be accommodated (please refer to the attached calculations).

This interim solution would will eliminate the discharge from Outfall 010 therefore not require sampling of Outfall 010 discharges since all storm and toe drain waters will be sent to Pond D. The waters would will then be treated and discharged to Internal Outfall 503 upon approval and commissioning of the treatment system.

Should you require further information please contact us at your earliest convenience.



DRAFT

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company Possum Point Power Station Coal Combustion Residual Surface Impoundment Closures Dumfries, Virginia

GAI Project Number: C150132.00

January 2016



DRAFT

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00

January 2016

Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

Prepared by:
GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060-3328

Report Authors:	
Brian Bullock Senior E.I.T.	
John Klamut Engineering Manager	

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Appendix C – Toe Drain Detail Sheet

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a 1,845 megawatt natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective January 19, 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of groundwater associated with the Ash Pond D toe drain. The purpose of this document is to identify present Dominion's a groundwater separation plan for the outfall associated with the Pond D toe drain, referred to as Outfall 010. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

2.0 Original System Description

The existing discharge at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by the original design drawings, attached in Appendix A, the storm sewer system is comprised of two VDOT Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and downstream inlets are connected by 18-inch concrete pipe. The system discharges through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. The total contributing drainage area for the two inlets is approximately five acres.

The toe drain[KR1] contributions enter the storm sewer system through a two-foot square toe drain (Invert Elevation 18.00 feet). Refer to the Toe Drain Manhole Detail Sheet & Toe Drain Detail Sheet, attached in Appendix B & C respectively.

3.0 Regulatory Requirements

The following excerpt is the applicable condition in the Staion's VPDES Permit No. VA0002071: Part 1. F. 23.:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater — only discharges from this outfall would be designated as Outfall S107 and governed by

the requirements of Part 1. A. 15, Part I.E and Part I.F18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

4.0 Interim Solution

The active construction phase (i.e., "Interim Solution") will provide a temporary method of separating all groundwater contributions to the discharge. This will be done by creating a system within the current inlet structure for where groundwater from the toe drain to will be captured and pumped to Pond D. While the interim solution is being utilized, stormwater runoff will remain to be conveyed through the existing stormsewer system.

4.1 Description

Refer to Figure 1, which shows the proposed interim plan. Groundwater separation will be acomplished by diverting all of the water which collects in the Pond D Toe Drain. The construction of the proposed diversion will involve installing a 3' square one-inch-thick HDPE flat stock, with an 18-inch diameter stub out, over the existing two-foot square toe drain. An 18" HDPE Tee will be fitted to the opposing 18" stub out. A 3' long capped section of 18" HDPE pipe will be secured to the bottom of the Tee joint. This will constitute the bottom of the HDPE system. A section of 18" HDPE pipe will be fuzed to the top of the Tee joint, extending through the top of the existing structure. The existing grate will be modified to allow this section to extend to the desired elevation.

The HDPE pipe system will be supported by a series of cantelivered supports anchored to the walls of the existing structure. As a redundancy – the system will also be supported by a vertical of HDPE pipe running from bottom of the inlet structure to the HDPE system.

A generator-powered automated pump will be utilized to pump the groundwater through the system to Pond D. The pump and generator will be run manually or automatically 24 hours per day by the site contractor.

4.2 Wet Weather & Dry Weather Considerations

The Interim Solution will operate during wet & dry weather conditions by mechanically separating the groundwater toe drain contributions from the inlet discharge. The mechanical separation of the flows will provide complete separation of the groundwater flows during wet and dry weather conditions. The system will be monitored at a minimum frequency of once every 5-days, or no more than 48-hours after a runoff producing rain event to confirm there are no groundwater contributions to the discharge [KR2].

4.3 Schedule

The Interim Solution is scheduled to be installed and operational in January 2016 Dominion would like to implement the Interim Solution as soon as possible. The Interim Solution will remain in service until the Long Term Solution can be implemented.

4.4 As-Built Drawings

As-Built Drawings will be prepared <u>and provided to DEQ</u> to <u>confirm that support the conclusion that</u> all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

5.0 Long Term Solution (Overview)[KR3]

Dominion intends to permanently remove the groundwater portion from the existing Outfall 010 and has developed a conceptual plan for moving forward with this separation. The post-construction phase (i.e., "Long Term Solution") will provide a method to tie the groundwater flow into the sanitary sewer system or permanently divert the flow to internal Outfall 503. This will include the construction of a permanent pump station, as well as relocating the existing storm sewer system to permanently separate it from the Pond D Embankment toe drain infrastructure. Once the Long Term Solution design is completed, a revised demonstration plan will be submitted to the DEQ for approval in accordance with VPDES PermitNo. VA0002071 Part 1. F. 23.

FIGURE: 1

Interim Solution: Toe Drain Separation Plan



APPENDIX A
Original Design Drawing: Plan View



APPENDIX B Toe Drain Manhole Detail Sheet



APPENDIX C Toe Drain Detail Sheet



Table
Possum Point Toe Drain compared with Draft Limits for Outfall 010

Market Market Company			aft Limits	Pond D	Toe Drain
Parameters	Units	Monthly Average	Daily Maximum	Pond D T D1 12/14/2015	Pond D T D2 12/14/2015
pH	S.U.	NA	NA	5.9	6.3
Total Suspended Solids	mg/L	30	100	<1.0	<1.0
Oil/Grease Hexane Extractable	mg/L	15	20	<5.0	<5.0
Antimony, Total	ug/L	TBD	TBD	<0.140	<0.140
Antimony, Dissolved	ug/L			<0.140	<0.140
Arsenic, Total	ug/L	220	220	<0.830	<0.830
Arsenic, Dissolved	ug/L			<0.830	<0.830
Cadmium, Total	ug/L	1.1	1.1	<0.100	<0.100
Cadmium, Dissolved	ug/L			<0.100	<0.100
Trivalent Chromium, Total	ug/L	73	73	<5	<5
Trivalent Chromium, Dissolved	ug/L			<10	<10
Hexavalent Chromium, Total	µg/L	16	16	<3	<3
Hexavalent Chromlum, Dissolved	µg/L			<5	<5
Copper, Total	µg/L	8.4	8.4	1.61	1.53
Copper, Dissolved	µg/L			1.52	1.53
Lead, Total	μg/L	11	11	<0.100	<0.100
Lead, Dissolved	µg/L			<0.100	<0.100
Mercury, Total	μg/L	1.1	1.1	<0.2	<0.2
Mercury, Dissolved	µg/L			<0.2	<0.2
Nickel, Total	µg/L	19	19	5.16	4.36
Nickel, Dissolved	µg/L			5.49	5.39
Selenium, Total	µg/L	7.3	7.3	0.819	1.11
Selenium, Dissolved	μg/L			0.702	0.932
Silver, Total	μg/L	1.5	1.5	<0.0300	<0.0300
Silver, Dissolved	μg/L			<0.0300	<0.0300
Thallium, Total	μg/L	TBD	TBD	<0.100	<0.100
Thallium, Dissolved	µg/L			<0.100	<0.100
Zinc, Total	µg/L	77	77	7.67	7.60
Zinc, Dissolved	µg/L			7.91	8.78
Chloride	μg/L	340,000	340,000	41,800	38,600
Acute Toxicity – C. dubia (7)		see footnote	(7)		
Acute Toxicity – P. promelas (7)		see rootnote	(7)		
Chronic Toxicity – C. dubia (8)		see footnote	(9)		
Chronic Toxicity - P. promelas (8)		see rootnote	(0)		

Footnotes

- 1) Values preceded by "<" represent results not detected at the Reporting Detection Limit (RDL) and listed as < RDL.
- 2) Values with suffix "±" represent results with an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte.
- 3) Constitulents with No Limit (NL) have been omitted from this table
- 4) NA- Not analyzed.
- 5) mg/L milligrams per liter.
- 6) μg/L- micrograms per liter.
- 7) Reported as No Observed Effect Concentration (NOEC); 100% NOEC is required for Acute Toxicity tests.
- 8) Reported as Chronic Toxicity Units; A maximum of 2.85 Chronic Toxicity Units allowed for Chronic Toxicity Results.
- 9) TBD To Be Determined

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A. Effluent Limitations and Monitoring Requirements

9. Outfall 010 - Ash Pond D Toe Drain

There shall be no discharge of floating solids or vaible foam in other than trace amounts.

b. During the period beginning with the permit's major modification date and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 010. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter		Discharge Limitati	ons	7.		nitoring irements
	Monthly Average(1)	Daily Maximum(1)	Minimum	Maximum ⁽¹⁾	-	Sample Type
Flow (MGD)	NL	NA 🦓	NA .	NL	lM	Estimate
pH	NA	NA	6.0 (S.U.)	9.0 (S.U.)	IM	Grab
Total Suspended Solids (TSS) (3)	30 mg/L	100 mg/L	NA	NA	l/М	Grab
Oil and Grease (O&G)	15 mg/L	20 mg/L	NA NA	NA	I/M	Grab
Specific Conductivity	NA	NA NA	NA.	NL (µhoms/cm)	1/M	Grab
Total Solids	NA	NA NA	NA.	NL (mg/L)	1/M	Grab
Aluminum, Total Recoverable(4)	NL (µg/L)	NL (µg/L)	NÄ	NA	1/M	4H-C
Antimony, Total Recoverable	TBD pg/L.	TRD jig/L	NA NA	NA NA	1/M	4H-C
Arsenic, Total Recoverable®	220 μ ₂/ L	220 µg/Is	NA	.NA	I/M	4H-C
Barium, Total Recoverable ⁽⁴⁾	NEGUSAL)	NE (ABAL)	NA	NA	1/M	4H-C
Beryllium, Total Recoverable(4)	NIA (II) A	NL (pg/L)	NA	NA	1/M	4H-C
Boron, Total Recoverable[4]	NL (IOL)	NL (μg/L)	NA	NA	1/M	4H-C
Cadmium, Total Recoverable ⁶³	1.1 µ\$/1.	1.1 μg/L	NA NA	NA	IM	4H-C
Chloride	340,000 µg/L	140,000 µg/L	NA	NA	IM	4H-Ç
Chromium III, Total Recoverable(3)	73 μg/L	73 µg/li	NA	NA	1/M	4H-C
Chromium VI, Total Recoverable ⁽⁰⁾	16 µg/L	16 µg/L	NA	NA	1/M	4II-C
Cobalt, Total Recoverable(4)	NL (µz/L)	NL (µg/L)	NA	NA.	1/M	4H-C
Copper, Total Recoverable(1)	8.4 ag/t-	8.4 µg/L	NA	NA	1/M	4H-C
Iron, Total Recoverable."	NL (µg/L)։	NL (µg/L)	NA	NA	I/M	4H-C
Lead, Total Recoverable ⁽³⁾	11 μg/L	11 µg/L	NA	NA	I/M	4H-C
Mercury, Total Recoverable(1)	1318µ2/L	1.1 µg/L	NA	NA	1/M	4H-C
Molybdenum, Total Recoverable(4)	NL (IEE)	NL (ug/L)	NA-	NA	1/M	4H-C
Nickel, Total Recoverable	19 μ ε/ Σ	19 μg/L	NA	NA	1/M	4H-C
Selenium, Total Recoverable	7.3 µz/L	7.3 µg/L	NA	NA	1/M	4H-C
Silver, Total Recoverable®	1.5 µջ/L	1.5 µg/L	NA	NA	1/M	4H-C
Thallium, Total Recoverable	TBD #g/L	TBD µg/L	NA	NA	1/M	4H-C
Vanadium, Total Recoverable ⁽⁴⁾	NL (pg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Zinc, Total Recoverable ⁽¹⁾	77 με/L	77 μg/L	NA	NA	1/M	4H-C
Hardness, Total (as CaCO ₃)	NL (mg/L)	NL (mg/L)	NA	NA	1/M	4H-C
Acute Toxicity – C. dubia (NOAEC)(1)	AM	NA	100%	NA	1/M	24H-C
Acute Toxicity - P. promelas (NOAEC) (1)	NA -	NA	100%	NA	1/M	24H-C
Chronic Toxicity - C. dubla (TU ₂) (a)	NA	NA	NA	1.44 TU ₀	1/M	24H-C
Chronic Toxicity - P. promelas (TU _c) (2)	NA	NA	NA	1.44 TU _e	1/M	24H-C

Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On February 8, 2016, four-hour composite samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, <u>prior</u> to mixing with any stormwater. These samples were collected concurrent with the four-hour composite samples collected from Outfall 010 for DMR compliance and were analyzed for all Outfall 010 parameters except whole effluent toxicity.

Results for the February 8, 2015 toe-drain samples were remarkably similar to the results for previous samples from this location (provided by email dated January 6, 2016) indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge (see Table 1 attached). In addition, the concentrations of all measured parameters are well below the newly established VPDES limits and applicable water quality criteria, and are within the range of values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Permit compliance samples from Outfall 010 were collected on February 8, 2016 concurrent with collection of the samples from the toe-drain portion of the discharge. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek, and were analyzed for all DMR parameters except chronic toxicity. Each 7-day chronic test requires the collection of three (3) 24-hour composite samples over a 5-day period. As reported to DEQ by email dated February 18, 2016, all flow from Outfall 010 was stopped on Friday, February 12, 2016. Therefore, Dominion was unable to collect a sufficient number of samples to conduct the chronic tests.

Path Forward

As noted above, all flow from Outfall 010 was stopped on Friday, February 12, 2016 following the insertion of an inflatable plug in the downstream end of the 72 inch discharge pipe. Insertion of the plug isolated the toe drain and stormwater contributions to Outfall 010, which have been collected and pumped to Ash Pond D. Since February 12, Dominion has initiated efforts to permanently plug the 72" discharge pipe. This will be accomplished by construction of a one-foot wide concrete plug in the downstream end of the pipe. Following installation and curing of the plug the remainder of the pipe will be backfilled with concrete. All accumulated sediment has been removed from the 72" pipe and pouring of the concrete plug was initiated on March 2, 2016.

DOMINION SYSTEM LABORATORY

REPORT PRODUCED ON 10/07/2003

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TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: BOB WILLIAMS

SL #	Sample Date	Description	Parameter	Result
307924	9/09/2003	ASHPOND D DELTA DRAIN	T-Hard. as CaCO3, PPM Phenol, PPM TOC, PPM Fluoride as F, PPM Chloride as Cl, PPM Sulfate as SO4, PPM Dis. As, ppb Dis. Ba, PPM Dis. Cd, ppb Dis. Cu, ppb Dis. Fe, PPM Dis. Pb, ppb Dis. Mn, PPM Dis. Ni, PPM Dis. K, PPM Dis. Se, ppb Dis. Na, PPM Dis. V, ppb Dis. Zn, PPM Arsenic as As, ppb Barium as Ba, PPM Cadmium as Cd, ppb Copper as Cu, ppb Iron as Fe, PPM Lead as Pb, ppb Manganese as Mn, PPM Mercury as Fg, ppb Nickel as Ni, PPM Potassium as K, PPM Selenium as Se, ppb Silver as Aç, ppb Sodium as Na, PPM Vanadium as V, ppb	150.48 0.05 1.8 0.151 107.53 78.73 < 0.04 0.3 12. 2.06 < 1. 0.68 < 0.2 0.04 7.85 < 0.1 36.6 < 0.063 < 3. < 0.063 < 3. < 0.063 < 3. < 0.07 8.40 < 0.2 0.07 8.40 < 0.3



DRAFT

Internal Outfall 503 Sampling Plan

Virginia Electric and Power Company Possum Point Power Station Coal Combustion Residual Surface Impoundment Closures Dumfries, Virginia

GAI Project Number: C150132.00, Task 050

February 2016



Prepared by: GAI Consultants, Inc. Richmond Office 4198 Cox Road, Suite 114 Glen Allen, Virginia 23060-3328 Prepared for: Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060-3308

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1.0 Project Overview

Virginia Electric and Power Company (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) (ash) ponds at the Possum Point Power Station (Station), an 1,845 megawatt, natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.1 Introduction

Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018 in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR Rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D. A drawing showing the site location is shown in Figure 1.

Ash Ponds A, B, and C were originally three contiguous ponds that have been inactive since the 1960s. Ash Ponds A, B, C, and E have been decanted and are being dewatered until all ash material has been removed, in accordance with applicable state and local requirements. Dredged ash material from the ponds was initially transported to Ash Pond D for storage. Diversion of dredged ash to Ash Pond D ceased in October 2015; since then, all remaining ash has been and will continue to be hauled to a permitted landfill for disposal.

Ash Pond D is scheduled to be decanted, dewatered, regraded, capped, and closed in the coming months. During the decanting and dewatering process, water from Ash Pond D will be treated and discharged to Outfall 001/002 via Internal Outfall 503. Following dewatering, Ash Pond D will be converted to a single regulated solid waste facility subject to all applicable state and federal closure and post-closure care requirements.

1.2 Project Description

This Sampling Plan addresses the planned procedures for sampling and analyzing water qualities for the following in accordance with the Final VA Pollutant Discharge Elimination System (VPDES) Permit VA0002071 issued by the VA Department of Environmental Quality (DEQ) with Major Modification Date of January 14, 2016 and expiring on April 2, 2018:

Grab, four-hour flow paced, and 24-hour flow paced sampling and analyses of discharged waters from Internal Outfall 503 - [Comingled Process Water, Ash Dewatering Water, Contact Water (Interim) / Ash Pond D Underdrain / Outfall 010 / Interim Outfall 501 (Final)] - When Routed to Outfall 001 / 002 or Outfall 004.

Discharges from Internal Outfall 503 during the "Interim Configuration" during construction (from the closure activities of Ash Ponds A, B, C, D, and E) consist of comingled process water in Pond D (i.e., Pond D Comingled Water) as well as Ash Dewatering Water, and stormwater in contact with ash (i.e., Contact Water). Pond D Comingled Water consists of a combination of stormwater as well as the following waters that have been comingled in Pond D as a result of the closure activities of Ash Ponds A, B, C, D, and E:

- ash dewatering water;
- contact water;
- metals cleaning waste (Outfall 501 water); and
- oil water (Outfall 502 water).

Pond D Comingled Water must be drained from Pond D to allow for the closure of Ash Pond D. Pond D Comingled Water includes an estimated 158 million gallons that has accumulated in Pond D as identified from a 2015 bathymetric survey and a water surface elevation surveyed on February 16, 2016.

Discharged waters from Internal Outfall 503 for the "Final Configuration" (i.e., following the closure activities of Ash Ponds A, B, C, D, and E) consist of Ash Pond D Underdrainage and Outfall 501 Water with potential for Pond D Toe Drainage. Pond D Toe Drainage consists of underflow from the Pond D Impoundment. Ash Pond D Underdrainage refers to future subsurface waters draining from closed and capped Pond D soil/ash below the proposed impermeable liner. Underdrainage waters are expected to reduce over time and eventually stop flowing.

Discharges of waters from Internal Outfall 503 are planned to be routed to Outfall 001/002.

2.0 Monitoring Objectives

The Final VPDES Permit for Industrial Wastewater Discharges (Permit) includes effluent limitations and monitoring requirements for Internal Outfall 503 for "Interim" and "Final Configurations". The effluent limitations and monitoring requirements for Internal Outfall 503 - When Routed to Outfall 001/002 or Outfall 004 are provided in Appendix A.

3.0 Sampling Locations

GAI Consultants, Inc. (GAI) proposes to collect water samples at the approximate locations defined in Table 1 or in alternate equivalent locations, e.g., upstream on the conveyance pipeline that discharges to Outfall 503. The proposed sample locations, discharge sources, treatment, average flow, and approximate coordinates (latitude and longitude) are as follows:

Table 1
Outfall Sample Locations

Outfall	Discharge Sources	Potential Treatment	Maximum Flow	Latitude and Longitude
503 (Interim Configuration)	Comingled Process Water, Ash Dewatering Water, Contact Water	Aeration, Chemical Addition, Clarification, Filtration, Activated Alumina, and/or Ion Exchange	2.88 MGD ¹	Location to be Determined
503 (Final Configuration)	Ash Pond D Underdrain, Internal Outfall 501, Potentially Pond D Toe Drainage	Technology to be Determined	2.88 MGD ¹	Location to be Determined

Note:

1. MGD = Million gallons per day.

4.0 Frequency of Sampling

Four-hour and 24-hour composite flow proportioned samples as well as grab samples are proposed to be collected three times a week or once a month at Internal Outfall 503 as required by the Final Permit. The frequency of sampling each parameter at the outfall is shown below in Tables 2 through 4.

Table 2 Internal Outfall 503 Weekly Monitoring

Constituent	Sample Frequency and Collection Method
Flow (MGD)	3 / W Estimate
рН	3 / W Grab
Total Suspended Solids	
Oils and Grease	
Antimony, Total	
Arsenic, Total	
Cadmium, Total	
Chloride	
Chromium, Total	
Chromium III, Total	
Chromium VI, Total	
Copper, Total	3 / W 4H-C
Lead, Total	
Mercury, Total	
Nickel, Total	
Selenium, Total	
Silver, Total	
Thallium, Total	
Vanadium, Total	
Zinc, Total	
Hardness, Total (as CaCO3)	

Notes:

- 1. 3 / W = three days per week.
- 2. 4H-C = four-hour flow proportional composite sample.
- 3. Grab = an individual sample over a period of time not to exceed 15 minutes.
- 4. Estimate = Reported flow based on technical evaluation of sources belonging to the discharge.
- 5. MGD = Million gallons per day.
- Total Chromium analysis is required to calculate Chromium III; although permit does not require
 monitoring/reporting of total Chromium.

Table 3 Internal Outfall 503 Monthly Monitoring

Constituent	Sample Frequency and Collection Method
Aluminum, Total	
Barium, Total	
Beryllium, Total	
Boron, Total	1 / M 4H-C
Cobalt, Total	17111110
Iron, Total	
Molybdenum, Total	
Vanadium, Total	

Table 3 (Continued)

Constituent	Sample Frequency and Collection Method
48-hr Static Acute Toxicity Test using Ceriodaphnia dubia	
48-hr Static Acute Toxicity Test using <i>Pimephales promelas</i>	1 / M 24H-C
Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia	1 / M 24n-C
Chronic 7-Day Static Renewal Survival and Growth Test using <i>Pimephales promelas</i>	

Notes:

- 1. 1 / M = Once per month.
- 2. 4H-C = four-hour flow proportional composite sample.
- 3. 24H-C = 24-hour flow proportional composite sample.

5.0 Field Sampling Procedures

GAI is proposing the analytical services of Air Water & Soil Laboratories, Inc. (AW&SL) located in Richmond, VA or Pace Analytical Services, Inc. (PACE) also located in Richmond, VA, for all constituents except for toxicity testing. These labs will be used until a PACE Mobile lab is Virginia-certified and available onsite. Coastal Bioanalysts, Inc. (CB) located in Gloucester, VA is proposed to perform the toxicity tests. The required turnaround time (TAT) for samples analyzed by AW&SL/PACE varies depending on the day of the week of sample collection, but in no case greater than three business days. The required TAT for the toxicity analyses by CB is eight business days. Plastic and glass bottles, labels, and coolers will be shipped to GAI's Richmond, VA office from both labs or as provided by the PACE onsite mobile lab trailer proposed onsite. GAI employees, in addition to other qualified samplers, will complete the bottle labels and relevant information in the chain-of-custody forms in advance of each sample event. Additionally, the sampling activities will be coordinated in advance with Dominion representatives.

5.1 Grab Samples

A smooth-nosed sample tap is proposed at the Internal Outfall 503 location. This sample tap will be used to collect grab samples and deliver them to the lab for analysis.

5.2 Flow Proportional Composite Samples

Four ISCO 6712FR refrigerated flow paced samplers will be used at Internal Outfall 503 (Interim/Final) to collect four-hour and 24-hour flow proportional composite samples. Each flow paced sampler is equipped with a single 5.3 gallon glass container to draw and collect flow paced samples for analysis. A three-eighths-inch inner diameter polytetrafluoroethylene suction line will connect to each of the four flow paced samplers. A high flowrate Watson-Marlow 620N peristaltic pump will be installed to feed Internal Outfall 503 discharges to a manifold for the four samplers. Refer to Appendices B, C, and D for more information regarding the flow paced samplers.

A Greyline clamp-on Transit Time Flow Meter (TTFM) Model 1.0 is proposed to measure Internal Outfall 503 discharges. The TTFM can relay a four- to 20-milliamp (zero- to five-volt) signal representing the totalizing flow at Internal Outfall 503. The flow paced samplers will be programmed to collect a sample at a given volume of flow through Internal Outfall 503. Refer to Appendices E and F for more information regarding the meter.

Following each sample event, the remaining collected waters in the flow paced sampler containers must be removed. A portable peristaltic pump and return line to discharge collected waters back to the discharge pipe (downstream of Internal Outfall 503) is proposed. After the flow paced sampler

containers have been emptied, distilled water and potentially Alconox, a non-phosphate detergent, may be applied to decontaminate the glass containers. Finally, the glass container will be rinsed three times with distilled water. The glass bottles will be wide mouthed for easy access/cleaning. Distilled water and Alconox solution waters will be collected in a portable container and discharged to a designated waste holding tank onsite that will be pumped out and sent to a treatment facility offsite.

Prior to each sample event, all peristaltic pump tubing will be replaced to reduce potential for cross-contamination. A sample blank will be collected at periodic intervals to assess the decontamination of each flow paced sampler utilized. This blank sample will be collected by filling the sampler containers with distilled water. The blank sample will be analyzed for all constituents analyzed for a given sample event.

GAI proposes a "dry-run" flow paced sampling event prior to the start of permit-required sampling.

The recommended power source for the refrigerated samplers is a designated 20-amp circuit. All automatic collection system components shall be housed in a heated enclosure in order to maintain a clean, temperature-controlled sampling environment.

Guidance documents on how to install the flow paced samplers, install the suction line, program the sampler, etc. are in Appendices C and D. A trained manufacturer's representative shall be employed to provide onsite technical support during the setup of the sampler and meter. Final equipment shall be selected and coordinated with the Station's contractor.

6.0 Analytical Testing Summary

GAI will measure pH from a grab sample and also estimate flow during each sample event. AW&SL or PACE will analyze all constituents in Table 4 except for toxicity testing which is to be performed by CB. Table 5 compares all Quantification Levels (QL) required by the DEQ and the proposed laboratory Limits of Quantitation (LOQ). To identify potential pathogen influence on toxicity samples, a UV-treated and non-UV-treated sample will be analyzed in the lab for each toxicity test unless otherwise directed by Dominion. Note that the toxicity sample volumes in Table 4 are for a single UV-treated or non-UV-treated test.

Table 4 Parameters for Analysis

Constituent	Number of Bottles per Sample ID	Preservation	Hold Time	Analytical Method
Flow (MGD)	N1/A	N/A	N/A	N/A
pH (Field measurement)	N/A		15 Minutes	S4500HB-00
Total Suspended Solids	(1) - 1 L plastic	> 0 °C to 6 °C	7 Days	SM22-2540D-2011
Oil and Grease	(2) - 1 L glass amber	HCI	28 Days	EPA 1664A
Flow (MGD)	N1/0	N/A	N/A	N/A
pH (Field measurement)	N/A		15 Minutes	S4500HB-00
Total Suspended Solids	(1) - 1 L plastic	> 0 °C to 6 °C	7 Days	SM22-2540D-2011
Oil and Grease	(2) - 1 L glass amber	HCI	28 Days	EPA 1664A
Aluminum, Total				EPA 200.7 R4.4
Antimony, Total				EPA 200.8 R5.4
Arsenic, Total				EPA 200.8 R5.4
Barium, Total	(1) - 500 mL plastic	> 0 °C to 6 °C	6 Months	EPA 200.7 R4.4
Beryllium, Total		and HNO₃	o Months	EPA 200.7 R4.4
Boron, Total				EPA 200.7 R4.4
Cadmium, Total				EPA 200.8 R5.4
Chromium, Total				EPA 200.7 R4.4

Table 4 (Continued)

Constituent	Number of Bottles per Sample ID	Preservation	Hold Time	Analytical Method
Cobalt, Total		> 0 °C to 6 °C and HNO₃	6 Months	EPA 200.7 R4.4
Copper, Total	(1) - 500 mŁ plastic			EPA 200.8 R5.4
Iron, Total				EPA 200.7 R4.4
Lead, Total				EPA 200.8 R5.4
Mercury, Total				EPA 245.1 R3.0
Molybdenum, Total				EPA 200.7 R4.4
Nickel, Total				EPA 200.8 R5.4
Selenium, Total				EPA 200.8 R5.4
Silver, Total	-			EPA 200.8 R5.4
Thallium, Total				EPA 200.8 R5.4
Vanadium, Total				EPA 200.7 R4.4
Zinc, Total				EPA 200.7 R4.4
Hardness, Total (as CaCO₃)				SM22 2340B-2011
Chloride	(1) - 250 mL plastic	> 0 °C to 6 °C	28 Days	EPA 300.0 R2.1
Chromium VI, Total	(1) - 500 mL plastic	> 0 °C to 6 °C	24 Hours	SM22 3500-Cr B-2011
48-Hour Static Acute Toxicity Test using Ceriodaphnia dubia	(1) - 0.5-gallon	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 2002.0
48-Hour Static Acute Toxicity Test using Pimephales promelas	plastic			40 CFR 136.3 EPA 2000.0
Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia	(1) - 2-gallon to 3-gallon plastic	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 1002.0
Chronic Seven-Day Static Renewal Survival and Growth Test using <i>Pimephales promelas</i> ⁴	(1) - 2-gallon to 3-gallon plastic	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 1000.0

Notes:

- 1. N/A = Not Applicable.
- 2. For side by side UV treated and non-UV treated toxicity analyses, double the volumes in the Table above.
- 3. Chronic Toxicity sample volumes required are: Monday (2 gal), Wednesday (2 gal), Friday (3 gal).
- 4. Total Chromium analysis is required to calculate Chromium III; although permit does not require monitoring/reporting of total Chromium.

Table 5
QL Comparison - Parameters for Analysis

Constituent	DEQ QL	Lab LOQ	Units	QL Achievable by Lab (Y / N)
Total Suspended Solids	1.0	1.0	mg/L	Yes
Antimony, Total	5.0	1.00	ug/L	Yes
Arsenic, Total	5.0	1.00	ug/L	Yes
Cadmium, Total	0.88	0.3	ug/L	Yes
Chromium III, Total	5.0	5	ug/L	Yes
Chromium VI, Total	5.0	5	ug/L	Yes
Copper, Total	5.0	1.00	ug/L	Yes
Lead, Total	5.0	1.00	ug/L	Yes
Mercury, Total	0.1	0.1	ug/L	Yes
Nickel, Total	5.0	1.00	ug/L	Yes
Selenium, Total	5.0	1.00	ug/L	Yes

Table 5 (Continued)

Constituent	DEQ QL	Lab LOQ	Units	QL Achievable by Lab (Y / N)
Silver, Total	0.4	0.100	ug/L	Yes
Thallium, Total	0.47	0.3	ug/L	Yes
Zinc, Total	25	10.0	ug/L	Yes

Notes:

- 1. QL = Quantification Levels.
- 2. LOQ = Limit of Quantitation.
- 3. QL and LOQ are synonymous terms.

7.0 Proposed Schedule

GAI proposes the schedule provided in Table 6 to stage the various sample events at the Internal Outfall 503.

Table 6
Proposed Schedule for Sampling Internal Outfall 503

Day of Week	Sample Events		
	Flow Estimate		
	3 / W 4H-C for Metals / Oils & Grease		
Monday	3 / W Grab for pH		
	1 / M 4H-C for remaining Metals		
	1 / M 24H-C for Chronic Toxicity (Day 1)		
	Flow Estimate		
	3 / W 4H-C for Metals / Oils & Grease		
Wednesday	3 / W Grab for pH		
	1 / M 24H-C for Chronic Toxicity (Day 2)		
	1 / M 24H-C for Acute Toxicity		
Friday	Flow Estimate		
	3 / W 4H-C for Metals / Oils & Grease		
	3 / W Grab for pH		
	1 / M 24H-C for Chronic Toxicity (Day 3)		

Notes:

- 1. Three days of samples are required for each Chronic Toxicity test. Toxicity samples will be collected on the first full week of the month so as to have results for issuance to DEQ the 10th day of the following month.
- 2. 3 / W = three days per week.
- 3. 1 / M = Once per month.
- 4. 4H-C = four-hour flow proportional composite sample.
- 5. 24H-C = 24-hour flow proportional composite sample.
- 6. Grab = An individual sample over a period of time not to exceed 15 minutes.

8.0 Quality Assurance/Quality Control of Sample Data

AW&SL and PACE are accredited laboratories by the Commonwealth of VA. Coastal Bioanalysts is accredited by the National Environmental Laboratory Program. The Lab Reports will be reviewed with the laboratory quality assurance / quality control (QA/QC) limits specified in each applicable laboratory Standard Operating Procedure (SOP) as well as the National Functional Guidelines (NFG), where applicable. Quality parameters monitored include but are not limited to holding times, sample receipt temperatures, method blank comparisons, matrix spike recoveries, laboratory control sample recoveries, etc., where applicable. If the laboratory data fall outside the laboratory SOP-specified OA/OC limits, data will be qualified or rejected based on the NFGs and professional judgement, as deemed necessary. Sensitivity of sample data will be monitored through the comparison of DEO-required OLs and the LOOs provided with laboratory data. Completeness of the data will be monitored for each laboratory deliverable. In order to maintain the comparability of data, sampling procedures described in Section 5.0 will be followed, and standard analysis methods will be utilized, as listed in Table 5. Unless specifically requested, formal validation of the laboratory data will not be conducted under this sampling plan. Data quality issues encountered will be documented in accordance with the permit and will be communicated to the client and Laboratory. Should a re-analysis of the respective constituents be required, such will be communicated and requested by the laboratory immediately.

9.0 Discharge Monitoring Reports

Laboratory results will be tabulated by GAI in Excel format and submitted to Dominion within four business days upon receipt of the sample by the lab; except under extenuating circumstances (e.g., weather-related delays, etc.). A copy of the Excel table is provided in Appendix G. Dominion will complete formal Discharge Monitoring Reports and submit electronically (or other approved format) to the DEQ in accordance with the conditions of the Final Permit.

APPENDIX A Outfall 503 (Interim/Final) Final Permit Discharge Monitoring/Limits



APPENDIX B ISCO 6172FR Flow Paced Sampler Catalog Cut



APPENDIX C ISCO 6172FR Flow Paced Sampler Installation Instructions



APPENDIX D ISCO 6172FR Flow Paced Sampler Programming Instructions and Information



APPENDIX E Greyline TTFM 1.0 Catalog Cut



APPENDIX F Greyline TTFM 1.0 Installation Instructions



APPENDIX G Sample Outfall 503 Discharge Monitoring Report



Please print or type in the unshaded areas

EPA ID Number (copy from item 1 of Form 1)

Form Approved, OMB No. 2040-0086

110000340774

United States Environmental Protection Agency Washington, DC 20460

Form 2F **NPDES**



Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water,

A. Outfall Number (list)]	B. Latitud	le	(C. Longitu	ide	D. Receiving Water (name)
S035	38	32	10	77	16	46	Potomac River
S105	38	32	28.53	77	17	2.05	Quantico Creek
S107	38	32	43.8	77	16	37	Quantico Creek
S108	38	32	59.25	77	17	36.52	Unnamed Tributary to Quantico Creek
S109	38	33	11.32	77	17	36.13	Unnamed Tributary to Quantico Creek

II. Improvements

Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions,	2.	Affected Outfalls			inal nce Date
Agreements, Etc.	number	source of discharge	3. Brief Description of Project	a. req.	b. рго <u>ј</u> .
Not Applicable					
				-	

You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34), each well where fluids from the facility are injected underground, springs, and other surface water bodies which receive storm water discharges from the facility.

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall,

anu a	all estillate of the total stillace area di	anica by the outrain.			
Outfall	Area of Impervious Surface	Total Area Drained	Outfall	Area of Impervious Surface	Total Area Drained
Number	(provide units)	(provide units)	Number	(provide units)	(provide units)
S35	0.135 acre	0.15 acre			
S105	2.4 acres	34.9 acres			
S107	0 acres	14.4 acres			
S108	0 acres	1.8 acre			
\$109	0 acres	0.5 acre			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The drainage area associated with Outfall S35 receives runoff from the north end of Unit #5 Cooling Tower B and drains approximately 0.15 acres consisting of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. The drainage area is similar in nature to that associated with existing Outfall S5, and consequently, Dominion requests that Outfall S5 to be considered representative of Outfall S35. Intake structure maintenance activities may occur in the drainage area.

The drainage area associated with Outfall \$105 originates from an area located on the east side of the railroad tracks and just west of the station's laydown area (see attached Site Plan). The drainage area consists of approximately 93% pervious and 7% impervious surfaces. Runoff contributing to Outfall \$105 flows westward through culverts under the railroad and Possum Point Road, enters a drainage channel located to the south of the inactive Ash Pond A, and is eventually discharged to Quantico Creek.

Outfall \$107 collects storm water from the berm of Ash Pond D via two drop inlets which is discharged to Quantico Creek southeast of Pond D. This outfall is designed to collect groundwater infiltration from the ash pond's berm for stabilization. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

In 2012, Dominion cleared the trees and brush from within 25 feet of the limits of the Ash Pond E embankment as required by Virginia Impounding Structure Regulations. As a result of this clearing, Dominion observed two areas along the downstream toe of the south embankment and west embankment that had poor surface drainage characteristics. Standing water is present in these areas during the wetter months of the year. Consequently, Dominion is undertaking a project to improve the surface drainage at the downstream toe portions of the south and west embankments of Ash Pond E by constructing grass-lined ditches. It is expected that the project will be completed during the first quarter of 2015. Outfalls \$108 and \$109 are proposed storm water outfalls originating from the south and west drainage areas, respectively. The drainage areas associated with theses outfalls are considered to be 100% pervious and will receive runoff from the areas south and west of Pond E, respectively. They are expected to be constructed in the first quarter of 2015. The drainage areas consist of 100% pervious surfaces.

The drainage areas for Outfalls \$105, \$107, \$108, and \$109 are located in close proximity to the station's ash ponds. The Possum Point Power Station does not currently generate coal ash, and none of the existing ponds have received ash for at least 10 years. Even so, given the location of these drainage areas Dominion is requesting that the associated discharges be permitted as storm water outfalls associated with industrial activity.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S35	Discharge to Surface Water	4-A
\$105		
S107		
S108		
S109		

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title (type or print)

Signature

Date Signed

Edward H. Baine

VP Power Generation System Operations

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S035 was visually inspected on 11/12/2014 during dry weather and no discharge was observed.

Outfall \$105 - the drainage channel for this outfall was visually inspected on November 3, 2014 during dry weather and no flow was observed.

Outfall S107- there is a continuous discharge from this outfall due to the uncontaminated groundwater contribution. Uncontaminated groundwater is an allowable non-storm water discharge (see permit condition I.E.1.b.1.i).

Oufall \$108 & \$109 - the improvements leading to the creation of these outfalls has yet to be realized. These outfalls will be inspected for non-storm water flows once they exist.

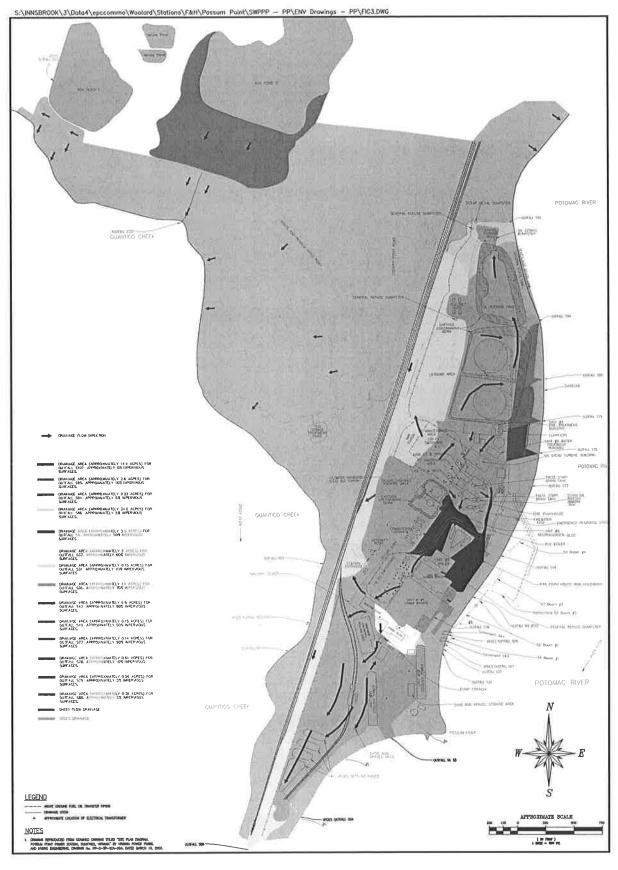
VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage areas associated with S35, S105, S107, S108, and S109.

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A,B,C, & D: See instruction before proceed	ling. Complete one set of tables for each outfall. Annotate the	ne outfall number in the space provided.
E. Potential discharges not covered by ana	C are included on separate sheets numbered VII-1 and VII-2 dysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F	4 a substance or a component of a substance which
vou currently use or manufacture as an i	intermediate or final product or byproduct?	-4, a substance of a component of a substance miner
Yes (list all such pollutants below,		No (go to Section IX)
Tes (nsi un suen pondianis vetor)	·	2 3 1 1 1 1 2 1 2 1
VIII Piological Toxicity Testin	r Data	
VIII. Biological Toxicity Testin	eve that any biological test for acute or chronic toxicity has b	een made on any of your discharges or on a receiving
water in relation to your discharge within the		on made on any or your distingtion of on a receiving
Yes (list all such pollutants below,		No (go to Section IX)
1 cs (nst un such potitions scion)		23 110 100 100 100 100 100 100 100 100 10
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IX. Contact analysis Informati	on	
Were any of the analysis reported in item VII	performed by a contact laboratory or consulting firm?	
	elephone number of, and pollutants	□ 37 / 6 / 17
analyzed by, each such labo		I \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
		No (go to Section X)
	ratory or firm below)	No (go to Section X) ea Code & Phone No.
A. Name	ratory or firm below)	
	ratory or firm below)	
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SITE PLAN DRAINAGE AREA

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Information to Supplement June 30, 2014 Form 2F-ATTACHMENT A

The following information is provided as a supplement to ATTACHMENT A of our June 30, 2014 application and provides additional information relative to the decant structure associated with Ponds ABC at our Possum Point Power Station.

Decant Structure Description

Construction details for the Possum Point Power Station Ash Pond ABC decant structure are provided in the attached March 24, 1954 drawings. The decant structure is a concrete riser with internal dimensions of approximately 4 ft. by 18-ft. high. The upstream side of the structure has a slot in which individual concrete members are placed one on top of the other to form a wall. These members are commonly referred to as stoplogs. The stoplogs are each approximately 12-inches high, 8-inches deep and 4 ft. - 6 inches long. The stoplogs extend from about 6 inches below the top of the structure to 14 ft. - 6 inches below the top of the structure (42 inches above the bottom of the structure). The outlet from the riser is a 30-inch diameter concrete pipe with the invert elevation about 1 ft. above the bottom of the structure. The top of structure elevation is approximately equal to the top of the earth dam. For safety purposes the top of the structure is fitted with a galvanized metal grating (this may be a source of zinc to the water).

Observations Related to Inflow to the Decant Structure

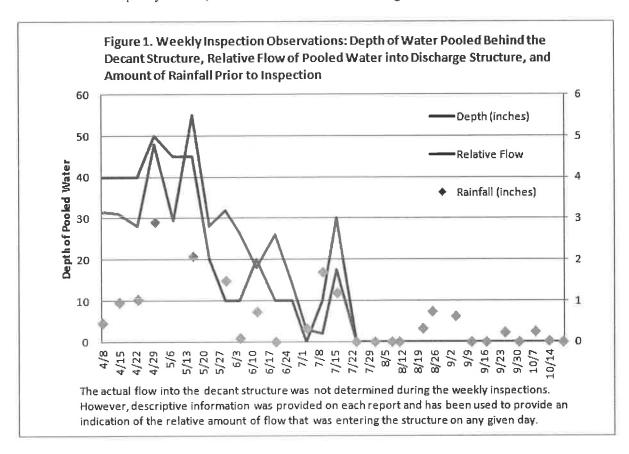
Since submittal of our June 30, 2014 application, Dominion has continued to perform weekly inspections of Ponds ABC and the associated decant structure. The inspections have been timed to coincide with storm events as they have been observed to occur throughout the period. During each inspection observations have included the depth of water pooled behind the decant structure, a description of the amount of water that was entering the decant structure, and the amount of rainfall that occurred prior to each inspection. Throughout the period of inspection water that was observed to enter the structure did so at an elevation at or above that of the pond surface. A summary of the information generated during the inspections is presented in Figure 1. A review of the observations indicates the following:

- The amount of water entering the decant structure has been directly related to the amount of precipitation prior to each inspection.
- During wetter periods (i.e., April May) some flow into the decant structure was consistently observed; however, the amount of pooled water behind the structure (28 55 inches) and the degree of flow into the structure (e.g., no change, small flow, significant increase) varied in relation to the amount of rainfall that occurred between individual inspection events. It should be noted that the inspections were timed to correspond with precipitation events (i.e., periods when the in-flow to the structure would have been expected to increase) so the true change in pooled water elevation and the degree of flow between inspections could have been much more and less, respectively, than what was observed.
- During drier periods (i.e., June November 17) no flow was observed entering the structure.
- As noted in the decant structure description above, there is some difference in elevation between the bottom of the discharge structure and the bottom elevation of the concrete discharge pipe (i.e., there is always some standing water in the bottom of the decant structure).

Implications for Permitting

Based on discussions with DEQ staff and a review of preliminary permitting documents, Dominion understands that DEQ is considering permitting the discharge from Ponds ABC as a continuous discharge and, as such, is considering applying the same 2:1 chronic assimilative capacity approach that was applied to the Possum Point Power Station process wastewater discharges. Dominion does not believe that this approach is appropriate given the storm water nature of the ABC pond discharge. Even so, we had our consultant LimnoTech perform screening level modeling to evaluate the chronic mixing that would be

anticipated for such a discharge (see attached). The results of this analysis demonstrate that an assimilative capacity of considerably greater than 2:1 is appropriate for application of Virginia's chronic water quality criteria to the discharge from the Pond ABC decant structure. As such, we recommend that should DEQ continue with their water quality-based effluent limits approach that the evaluation be based on the acute water quality criteria, which we believe are the limiting criteria in this situation.





1015 18th Street, NW Suite 900 Washington, DC 20036 202.833.9140 www.limno.com

Memorandum

From: Virginia Breidenbach, PE

Date:

December 10, 2014

Dave Dilks, PhD

Project:

TSDOM

To:

Dominion Environmental Services

SUBJECT:

Screening Level Dilution Evaluation for Pond C Discharge to Quantico Creek

Summary

This memorandum presents a screening level evaluation of dilution for the Pond C decant structure discharge to Quantico Creek under chronic toxicity conditions.

The results of this assessment indicate that for chronic toxicity, dilution factors greater than two are likely achieved for Pond C discharge flow rates up to approximately 270 gpm.

A description of the Pond C decant structure discharge, approach to the dilution evaluation, assumptions and data inputs, and evaluation results are discussed below.

Discharge Description

The Pond C outfall is located on the northeast bank of Quantico Creek within the Virginia Electric and Power Company Possum Point Power Station. The discharge consists of a 30" concrete pipe leading from the decant structure at Pond C. The pipe outfall is located approximately 20 feet from the creek bank. A small channel leads from the outfall to the creek. The outfall does not appear to be submerged.

The only recorded flow rate available for the discharge is an estimate of 2 gpm made from visual observation by a VDEQ staff person on a field visit conducted on April 11, 2014 (Demers and Mackert, April 15, 2014). No flow was observed from the outfall on site visits made by LimnoTech staff on November 3, 5, and 6, 2014.

Approach

The approach used to determine chronic toxicity dilution factors for the Pond C decant structure outfall was patterned after the most commonly used approach for assessing chronic mixing zones in rivers. The approach allows a fraction of the total available flow to be used for dilution, with this fraction being set equal to the fraction of the water body's cross-sectional area allotted to the chronic mixing zone. For Quantico Creek, this fraction of total available flow to be used for dilution was assumed to be the more stringent case specified in Virginia rules for estuarine and transition zone waters as no more than "five times in any direction the average depth along a line extending 1/3 of the way across the receiving water from the discharge point to the opposite shore" (9VAC25-260-20). Because Quantico Creek is tidally influenced, it is appropriate to use

the total dilution flow available over a tidal cycle (rather than just the upstream freshwater flow). The chronic toxicity dilution factor equation therefore becomes:

$$S = (Q_w + Q_{dit})/Q_w \tag{1}$$

Where,

S = dilution factor

 Q_w = wastewater flow from Pond C

Q_{dil} = total dilution flow

Total dilution flow is calculated as:

$$Q_{dil} = a \left(Q_{up} + Q_{TID} \right) \tag{2}$$

Where.

a = fraction of total available flow to be used for dilution

Q_{up} = upstream Quantico Creek flow from stream gage data

 Q_{TID} = tidal flow

The fraction of total available flow to be used for dilution calculated as:

$$a = (5 * local water depth) / (width of embayment)$$
 (3)

Tidal flow is calculated as:

$$Q_{TID}$$
 = (average change in water depth over a tidal cycle) * (4)
(embayment surface area)/12.5 hours

The dilution factor is adjusted to account for the fraction of wastewater flow that is returned within the tidal cycle, thus limiting available mixing. The resulting effective dilution factor is calculated as:

$$S_{\text{effective}} = S * (1 - r_c) \tag{5}$$

Where,

 r_c = return rate of mass discharged in the previous tidal cycle

In this instance, a return rate of 0.5 was selected as a highly conservative estimate based on U.S. EPA guidance (U.S. EPA 1992) that states:

"the r_c factor can be expected to vary in the range of \leq 0.1 to \approx 0.5 (highly conservative estimate). It is very small (\leq 0.1) for deep water discharges in the open coastal zone that are often associated with internal trapping of buoyant surface layer formation....It may be reasonably high (up to 0.5) for shallow



water, vertically mixed discharges to strongly restricted estuaries with weak flushing."

It is emphasized that this approach is a screening level estimation and not a rigorous assessment. Virginia regulations specify mixing zone dimensions that extend upstream, downstream, and across-stream from the point of discharge. Experience has shown that this approach provides a conservative estimate of dilution when assessing the across-stream mixing zone boundary. It is not as clear how protective this approach is of the up- or downstream boundary. It is worth noting that the approach above was accepted by U.S. EPA Region III for developing NPDES permits for the District of Columbia's Blue Plains Wastewater Treatment Plant discharge to the Potomac River.

It should also be noted that the VPDES Permit Manual (VDEQ, 2014) states that for storm water discharges and intermittent discharges (< 4 days duration), water quality-based effluent limitations can be established using acute toxicity only.

Data Inputs and Assumptions

The data and assumptions used to calculate chronic toxicity dilution factors for the Pond C decant structure discharge are given in Table 1.

Table 1: Data Inputs with Sources for Chronic Toxicity Dilution Calculations

Parameter	Value	Units	Source
Surface area of Quantico Creek embayment	31,210 ,000	ft ²	GIS from aerial photo
Average change in water depth over tidal cycle	1.5	ft	NOAA chart dated August 2013 (http://www.charts.noaa.gov/OnLineViewer/12288.shtml)
Average water depth in vicinity of discharge at MLLW	1	ft	NOAA chart dated Aug 2013 (http://www.charts.noaa.gov/OnLineViewer/12288.shtml)
Embayment width at outfall location	2,800	ft	GIS from aerial photo
Q _{up} (S.F. Quantico Creek)	0.004	cfs	7Q10 streamflow for 1951-2003 SF Quantico Creek (USGS 01658500) reported by VDEQ (www.deq.state.va.us/Portals/0//Virginia_Stream_Flow_Data _2005.xls)
Drainage area (DA) at gage	7.62	mi ²	USGS 01658500 (http://waterdata.usgs.gov/va/nwis/inventory/?site_no=01658 500&agency_cd=USGS)
Drainage area at Quantico Creek pour point	30.8	mi ²	GIS from digital elevation model
DA ratio	4.0		Calculated
Q _{up}	0.016	cfs	DA ratio * Q _{up} (S.F. Quantico Creek)
Q_{w}	2	gpm	VDEQ staff 4-16-14 site visit memo
r _c	0.5		Conservative value from U.S. EPA, 1992



Results

Estimated chronic toxicity dilution factors were calculated using the approach described above for a range of Pond C discharge flow rates, as indicated in Figure 1. As mentioned above, the only recorded flow rate for the outfall is 2 gpm, which was an estimate made via observation.

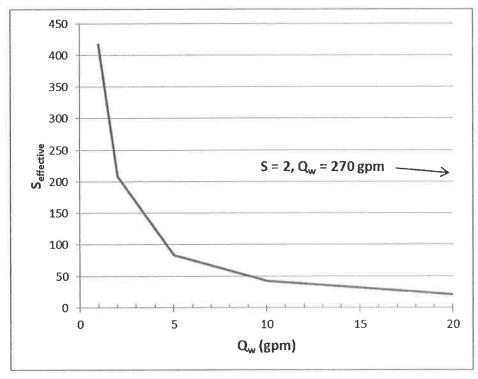


Figure 1: Chronic Toxicity Dilution Factors for Varying Pond C Decant Structure
Discharge Rates

Dilution factors greater than two are estimated for discharge flow rates up to 270 gpm, while dilution factors greater than 50 are estimated for discharge flow rates up to approximately 8 gpm.

References

Commonwealth of Virginia Department of Environmental Quality Water Division (VDEQ). 2014. VPDES Permit Manual.

Demers, Dan and Susan Mackert to Tom Faha. Virginia Department of Environmental Quality Northern Regional Office. April 15, 2014. Updated April 16, 2014. Dominion – Possum Point Power Station VA0002071. [Memorandum]

United States Environmental Protection Agency Office of Water (U.S. EPA). 1992. Technical Guidance Manual for Performing Wasteload Allocations Book III: Estuaries, Part 3: Use Of Mixing Zone Models in Estuarine Waste Load Allocations. EPA-823-R-92-004.



Proposed Permit Modifications for Possum Point

I.F.1. Operation and Maintenance (O&M) Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the facility <u>and associated treatment infrastructure</u> that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31...

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

c. Discussion of Best Management Practices ("BMPs") including any that may be applicable to storage areas for fossil fuel combustion byproducts described in Part 1.F.3, if applicable;

I.F.3. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in accordance with BMPs. For any active or inactive storage areas for fossil fuel combustion byproducts, these BMPs shall include, at a minimum, quarterly visual inspections of seeps or potential unanticipated releases such as leaks, spills, breaches or other releases. In the event that seeps are detected, then the permittee shall implement BMPs to minimize discharges of pollutants, if any, to surface waters. In the event that an unanticipated release is detected, then the permittee shall implement BMPs to minimize discharges of pollutants, if any, to surface waters and to implement corrective action to address the unanticipated release. All inspections and other BMPs that are implemented shall be

documented and made available to DEQ upon request. No other discharges of such product, materials, industrial wastes and/or other wastes to surface waters are permitted, such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

Seek to replace I.F.10 (Debris Collection) with the analogous provision from the Chesterfield permit:

<u>Discharge of Debris from Trash Racks</u> <u>Debris collected on the intake trash racks shall not be returned to the</u> waterway

II.R Disposal of Solids

Except in compliance with this permit, or another permit issued by the Board, sSolids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

I.A.12 Effluent Limitations and Monitoring Requirements (Stormwater)

Add S117 back into the permit.

Add Ponds A/B swale.

Redesignate S107 as industrial given potential for seepage.

I.D.3.a Site Characterization

Should data warrant, DEQ may require a Site Characterization Report for Ash Ponds A, B, C, D, E or the Oily Waste Treatment Basin...

Please print or type in the unshaded areas

2F NPDES EPA ID Number (copy from item 1 of Form 1)

110000340774

Form Approved. OMB No. 2040-0086

Form

\$EPA

United States Environmental Protection Agency Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water. D. Receiving Water Outfall Number B. Latitude C. Longitude (name) (list) 38 43.8 77 16 37 Quantico Creek 32 S107 21 77 **Unnamed Tributary to Quantico Creek** S108 38 32 52 17

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

Identification of Conditions,		2. Affected Outfalls			inal nce Date
Agreements, Etc.	number	source of discharge	3. Brief Description of Project	a. req.	b. proj.
CCR Rule 40 CFR Part 257, Subpart D	S107 S108	Stormwater Associated with Industrial Activity	Closure of the station's existing, inactive ash ponds.	04/18/15	04/18/15

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued from the Front IV. Narrative Description of Pollutant Sources For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall. Total Area Drained Outfall Area of Impervious Surface Total Area Drained Outfall Area of Impervious Surface (provide units) Number (provide units) (provide units) Number (provide units) S107 14.4 acres 0 acres S108 0.4 acres 0.76 acres Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Outfall S107 collects storm water from the berm of Ash Pond D via two drop inlets. It is characterized as a non-industrial stormwater outfall in the existing permit. Collected stormwater is discharged to Quantico Creek southeast of Ash Pond D. This outfall also collects groundwater infiltration from toe drains associated with Ash Pond D. The drainage area is approximately 14.4 acres, consists of grass and vegetative slopes, and is considered to be 100% pervious. Outfall S108 is a new storm water outfall that discharges to an unnamed tributary of Quantico Creek, located south of Pond E. This outfall is located at the point of convergence for runoff from a VDOT culvert and the culverts containing the station's former ash sluice lines. The drainage area associated with this outfall will receive runoff from the area south of Pond E and located near the construction entrance. The drainage area is approximately 0.76 acres and consists of approximately 95% pervious surfaces. The drainage areas for Outfalls S107 and S108 are located in close proximity to the station's ash ponds. Consequently, stormwater contributing to these outfalls may be impacted by ash management activities associated with the pond closure project. Given the location of these drainage areas Dominion is requesting that Outfalls \$107 and \$108 be permitted as storm water outfalls associated with industrial activity. As the pond closure project progresses ash management activities will eventually cease and only construction activities covered by a Virginia Construction Stormwater General Permit will occur within the drainage areas for S107 and S108. Dominion has implemented BMPs in the drainage areas contributing to Outfalls S107 and S108 including grading of haul roads, the installation of straw bales and silt fences, and periodic inspections. In addition, the station's SWPPP (developed in accordance with the VPDES individual permit) will be updated to incorporate BMPs, to minimize the impact of ash management

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall		List Codes from
Number	Treatment	Table 2F-1
S107	Discharge to Surface Water	4-A
S108		

T 7	TAT	Stormwater	TV:	
v	Non	Stormwater	Discharges	

A.	I certify under penalty of law that the outfall(s) covered	by this application have been tested or evaluated for the presen	ce of nonstormwater discharges,
	and that all nonstormwater discharges from these outfa	I(s) are identified in either an accompanying Form 2C or Form 2	2E application for the outfall.
Name	of Official Title (type or print)	Signature	Date Signed

David A. Craymer

VP Power Generation System Operations

activities that may occur with the associated drainage areas.

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S107- There is a continuous discharge from this outfall due to groundwater contribution. This outfall will be inspected for non-storm water flows.

Outfall S108 - This outfall discharges primarily during rain events. This outfall will be inspected for non-storm water flows.

VI. Significant Leaks or Spills			
Provide existing information regarding the history the approximate date and location of the spill or lo	ak, and the type and amount of material rel	eased.	
No spills or leaks of toxic or hazardous po			
with S107. On August 6, 2015, pump fail			
water storage tank that was collecting ground			
which occurred within the drainage area for			
excessive stormwater runoff within the dra			
volume of coal ash, overwhelmed existing		08. The discharge and follow	-up actions are
described in an October 5, 2015 letter to I	EQ.		
VII. Discharge Information			
A,B,C, & D: See instruction before proceeding. C Tables Vii-A, VII-B, and VII-C are i	ncluded on separate sheets numbered VII-1	and VII-2.	
Potential discharges not covered by analysis - you currently use or manufacture as an intermet	is any toxic pollutant listed in table 2F-2, 2 diate or final product or byproduct?	(1000000)	
Yes (list all such pollutants below)			No (go to Section IX)
No analytical data exist for either stormwa	iter outfall S107 or S108. The indu	ustrial activities that will occu	ur in the drainage areas
for these outfalls consists of the managem			
the station burned coal to generate electric			
development of Sector O requirements inc			ermits. Related
conditions have been incorporated into Po	ssum Point's individual VPDES pe	ermit.	
THE BUILDING TO SEE TO SEE THE	4_		
VIII. Biological Toxicity Testing Da		cicity has been made on any of your	discharges or on a receiving
VIII. Biological Toxicity Testing Da Do you have any knowledge or reason to believe tha water in relation to your discharge within the last 3 y	t any biological test for acute or chronic tox		
Do you have any knowledge or reason to believe that	t any biological test for acute or chronic tox		discharges or on a receiving No (go to Section IX)
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Do you have any knowledge or reason to believe that water in relation to your discharge within the last 3 y Yes (list all such pollutants below)	t any biological test for acute or chronic tox		
Do you have any knowledge or reason to believe that water in relation to your discharge within the last 3 yes (list all such pollutants below) IX. Contact analysis Information	t any biological test for acute or chronic tox years?		
Do you have any knowledge or reason to believe that water in relation to your discharge within the last 3 yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performance.	t any biological test for acute or chronic tox years?	rm?	No (go to Section IX)
Do you have any knowledge or reason to believe that water in relation to your discharge within the last 3 yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performance. Yes (list the name, address, and telephone)	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants	rm?	
Do you have any knowledge or reason to believe that water in relation to your discharge within the last 3 yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performance.	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants	rm?	No (go to Section IX)
Do you have any knowledge or reason to believe the water in relation to your discharge within the last 3 y Yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performantly yes (list the name, address, and telephone analyzed by, each such laboratory	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants or firm below)	rm?	No (go to Section IX) No (go to Section X)
Do you have any knowledge or reason to believe the water in relation to your discharge within the last 3 y Yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performantly yes (list the name, address, and telephone analyzed by, each such laboratory	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants or firm below)	rm?	No (go to Section IX) No (go to Section X)
Do you have any knowledge or reason to believe the water in relation to your discharge within the last 3 y Yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performantly yes (list the name, address, and telephone analyzed by, each such laboratory	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants or firm below)	rm?	No (go to Section IX) No (go to Section X)
Do you have any knowledge or reason to believe the water in relation to your discharge within the last 3 y Yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performantly yes (list the name, address, and telephone analyzed by, each such laboratory	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants or firm below)	rm?	No (go to Section IX) No (go to Section X)
Do you have any knowledge or reason to believe the water in relation to your discharge within the last 3 y Yes (list all such pollutants below) IX. Contact analysis Information Were any of the analysis reported in item VII performantly yes (list the name, address, and telephone analyzed by, each such laboratory	t any biological test for acute or chronic tox years? med by a contact laboratory or consulting fire number of, and pollutants or firm below)	rm?	No (go to Section IX) No (go to Section X)

EPA ID Number (copy from Item 1 of Form 1)

Continued from Page 3

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X. Certification								
I certify under penalty of law that this document and all attachments were prep								
accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted								
Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the								
information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware								
that there are significant penalties for submitting false information, including th	he possibility of fine and imprisonment for							
knowing violations.								
A. Name & Official Title (type or print)	B. Area Code and Phone No.							
David A. Craymer	(804) 273-3685							
VP Power Generation System Operations	, ,							
C. Signature	D. Date Signed							
C. Signature	D. Date Signed							

Please print or type in the unshaded areas

EPA 1D Number (copy from item 1 of Form 1)

110000340774

Form Approved. OMB No. 2040-0086

CEDA

United States Environmental Protection Agency Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

Form

2F

NPDES

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)		B. Latitud	le	(C. Longitu	ıde	D. Receiving Water (name)
S035	38	32	10	77	16	46	Potomac River
S105	38	32	28,53	77	17	2.05	Quantico Creek
S107	38	32	43.8	77	16	37	Quantico Creek
S108	38	32	59.25	77	17	36.52	Unnamed Tributary to Quantico Creek
S109	38	33	11.32	77	17	36.13	Unnamed Tributary to Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

Identification of Conditions,	2.	Affected Outfalls		4. Final Compliance Date		
Agreements, Etc.	number	source of discharge	Brief Description of Project	a. req.	b. proj.	
Not Applicable						
					_	

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall

Outfall	Area of Impervious Surface	Total Area Drained	Outfall	Area of Impervious Surface	Total Area Drained
Number	(provide units)	(provide units)	Number	(provide units)	(provide units)
S35	0.135 acre	0.15 acre			
S105	2.4 acres	34.9 acres			
S107	0 acres	14.4 acres			
S108	0 neres	1.8 acre			
S109	0 acres	0.5 acre			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water, method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The drainage area associated with Outfall S35 receives runoff from the north end of Unit #5 Cooling Tower B and drains approximately 0.15 acres consisting of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. The drainage area is similar in nature to that associated with existing Outfall S5, and consequently, Dominion requests that Outfall S5 to be considered representative of Outfall S35. Intake structure maintenance activities may occur in the drainage area.

The drainage area associated with Outfall S105 originates from an area located on the east side of the railroad tracks and just west of the station's laydown area (see attached Site Plan). The drainage area consists of approximately 93% pervious and 7% impervious surfaces. Runoff contributing to Outfall S105 flows westward through culverts under the railroad and Possum Point Road, enters a drainage channel located to the south of the inactive Ash Pond A, and is eventually discharged to Quantico Creek.

Outfall \$107 collects storm water from the berm of Ash Pond D via two drop inlets which is discharged to Quantico Creek southeast of Pond D. This outfall is designed to collect groundwater infiltration from the ash pond's berm for stabilization. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

In 2012, Dominion cleared the trees and brush from within 25 feet of the limits of the Ash Pond E embankment as required by Virginia Impounding Structure Regulations. As a result of this clearing, Dominion observed two areas along the downstream toe of the south embankment and west embankment that had poor surface drainage characteristics. Standing water is present in these areas during the wetter months of the year. Consequently, Dominion is undertaking a project to improve the surface drainage at the downstream toe portions of the south and west embankments of Ash Pond E by constructing grass-lined ditches. It is expected that the project will be completed during the first quarter of 2015. Outfalls \$108 and \$109 are proposed storm water outfalls originating from the south and west drainage areas, respectively. The drainage areas associated with theses outfalls are considered to be 100% pervious and will receive runoff from the areas south and west of Pond E, respectively. They are expected to be constructed in the first quarter of 2015. The drainage areas consist of 100% pervious surfaces.

The drainage areas for Outfalls \$105, \$107, \$108, and \$109 are located in close proximity to the station's ash ponds. The Possum Point Power Station does not currently generate coal ash, and none of the existing ponds have received ash for at least 10 years. Even so, given the location of these drainage areas Dominion is requesting that the associated discharges be permitted as storm water outfalls associated with industrial activity.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S35	Discharge to Surface Water	4-A
S105		
S107		
S108		
S109		

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title (type or print)

Signature

Date Signed

Edward H. Baine

VP Power Generation System Operations

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S035 was visually inspected on 11/12/2014 during dry weather and no discharge was observed.

Outfall \$105 - the drainage channel for this outfall was visually inspected on November 3, 2014 during dry weather and no flow was observed.

Outfall S107- there is a continuous discharge from this ontfall due to the uncontaminated groundwater contribution. Uncontaminated groundwater is an allowable non-storm water discharge (see permit condition I.E.1.b.1.i).

Oufall S108 & S109 – the improvements leading to the creation of these outfalls has yet to be realized. These outfalls will be inspected for non-storm water flows once they exist.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage areas associated with S35, S105, S107, S108, and S109.

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VII. Discharge Information		
A,B,C, & D: See instruction before proceeding.	Complete one set of tables for each outfall. Annotate the	outfall number in the space provided.
	included on separate sheets numbered VII-1 and VII-2 is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-	4 a substance or a component of a substance which
you currently use or manufacture as an interm		and a support of a
Yes (list all such pollutants below)		No (go to Section IX)
VIII. Biological Toxicity Testing Da	ata District	
Do you have any knowledge or reason to believe th	at any biological test for acute or chronic toxicity has be	en made on any of your discharges or on a receiving
water in relation to your discharge within the last 3	years?	
Yes (list all such pollutants below)		No (go to Section IX)
ma .		
IX. Contact analysis Information		
Were any of the analysis reported in item VII perfo		⊠
Yes (list the name, address, and telepho analyzed by, each such laboratory		No (go to Section X)
A Name		Code & Phone No. D. Pollutants Analyzed
X. Certification		
	his document and all attachments were prep	pared under my direction or supervision in
accordance with a system designed to	assure that qualified personnel properly gat	her and evaluate the information submitted
Based on my inquiry of the person or	persons who manage the system or those pe	rsons directly responsible for gathering the
information, the information submitte	ed is, to the best of my knowledge and belief	f, true, accurate, and complete. I am aware
	or submitting false information, including th	he possibility of fine and imprisonment for
knowing violations.		411. The state of
A. Name & Official Title (type or print)		B. Area Code and Phone No.
Edward H. Baine		(804) 273-3592
VP Power Generation System Operations C. Signature		D. Data Signed
Congriature		D. Date Signed



Web Address: www.dom.com



<u>BY CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

June 29, 2012



Mrs. Susan D. Mackert Environmental Specialist II Virginia Department of Environmental Quality - Northern Regional Office 13901 Crown Court, Woodbridge, VA 22193

Re: <u>Dominion - Possum Point Power Station - VPDES Permitted Storm Water</u> <u>Outfall Descriptions</u>

Dear Mrs. Mackert:

The information included with this submittal is provided in response to your request made during the May 30, 2012 conference call regarding Possum Point Power Station's VPDES permit reissuance. A summary of each storm water outfall's drainage area is provided below. Also included in the following summary is Dominion's requests for storm water monitoring under the VPDES permit as they pertain to each storm water outfall. A site map with each outfall's drainage area is enclosed in this letter for your review.

Outfall 005 (Discharge Point S5): Receives runoff from approximately 3.9 acres located between Unit #5's two cooling towers. The drainage area consists of approximately 50% impervious (building, roads) and 50% pervious (grass, gravel) surfaces. This outfall discharges to the Potomac River near the southeast corner of Unit #5 Cooling Tower A. Outfall 005 and 031 are similar in their storm water exposures (cooling towers, roads, buildings). Since Outfall 005's drainage area is larger and is exposed to both cooling towers, Dominion requests Outfall 005 be representative of Outfall 031.

Outfall 031 (Discharge Point S31): Receives runoff from the north end of the Unit #5 Cooling Tower B and includes 2 drop inlets that drain approximately 0.15 acre. The area consists of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. Dominion requests that Outfall 005 be representative of Outfall 031...

Outfall 036 (Discharge Point S36): The outfall receives runoff from a drainage area located at the area around Units 1&2 stacks and the road under Units 3&4 Precipitators and includes two drop inlets, one located under the Units 3&4 Precipitator and the other on the roof of Units 3&4 Screen Wells, which discharge to the Potomac River. The area consists of approximately

Mrs. Mackert June 29, 2012 Page 2

0.11 acre, which is approximately 70% impervious (road, roof) and 30% pervious (gravel). Due to the similar drainage area characteristics (i.e. roadway, parking lot and rooftops), Dominion requests Outfall 061 be representative of Outfall 036.

Outfall 037 (Discharge Point S37): Receives runoff from the area around the Administration (Admin.) building which is mainly vehicle parking and roofs associated with the Admin. building and the eastern half of the Maintenance Shop. The area consists of approximate 2.0 acres that is estimated to be 60% impervious (parking lot, roads, and roof tops) and 40% pervious (grass and gravel). Outfall 037 discharges to the Potomac River. Due to the similar size and characteristics (i.e. roads, parking lot and rooftops), Dominion requests that Outfall 061 be representative of Outfall 037.

Outfall 042 (Discharge Point S42): Receives runoff from approximately 6.6 acres. Storm water is collected through multiple drop inlets located around the perimeter of Unit #5 boiler and dust collector. The area is estimated to be 20% impervious (buildings, road, rooftops) and 80% pervious (gravel, grass). One of the drop inlets receives drainage conveyed via a ditch from the "Old" Combustion Turbines' oily-water separator. Outfall 042 discharges to the Potomac River. Outfalls 042, 049 and 077 have similar characteristics and locations, therefore Dominion requests that Outfall 042 be representative of Outfalls 049 and 077.

Outfall 049 (Discharge Point S49): Discharges to the Potomac River and collects drainage from the area east of the Unit #5 Boiler and north of the Oil Dock Foam House. This area includes one drop inlet and consist of approximately 0.15 acres. The drainage area's surface is estimated to be 50% impervious (road, roof) and 50% pervious (gravel). Dominion requests that Outfall 042 be representative of Outfall 049.

Outfall 061 (Discharge Point S61): Discharges to Quantico Creek and receives runoff from approximately 2.8 acres which includes the main entrance way to the plant, the gravel area west of the "Old" Combustion Turbine buildings, a portion of the roadway leading from the "Old" Combustion Turbines to the northwest end of the 115 kV Switchyard, the grassy area and railway located west of the 115 kV Switchyard, and the west end of the maintenance shop including the west ½ of the Maintenance Shop roof's drainage. The area is estimated to be 60% impervious (buildings, roads, rooftops) and 40% pervious (grass, gravel). Due to the similar drainage area size and industrial characteristics (roads, buildings, rooftops), Dominion requests Outfall 061 be representative of Outfall 036 and 037.

Outfall 077 (Discharge Point S77): Discharges to the Potomac River and collects drainage conveyed through a concrete pipe from the area surrounding the eastern edge of the No. 6 fuel oil pipe bench leading north to the Unit #5 Transfer Pump House. This area is approximately 0.14 acres that is estimated to be 10% impervious (road, rooftops) and 90% pervious (river bank, gravel). Dominion requests that Outfall 042 be representative of Outfall 077.

Mrs. Mackert June 29, 2012 Page 3

Outfalls 078, 079, 080 & 094 (Discharge Point S78, S79, S80, & S94 respectively): All four Outfalls discharge to the Potomac River via concrete flumes that drain the exterior berm of the Heavy Oil Tanks' containment. The size of each drainage area is 0.61, 0.56, 0.36, and 0.23 acres for Outfalls 078, 079, 080 and 094, respectively. All drainage areas are 100% pervious (vegetative slope) with no industrial activity. Since the drainage areas for the above listed outfalls do not include industrial activities, Dominion requests no storm water monitoring requirements be applied to Outfalls 078, 079, 080 & 094.

Outfall 086 (Discharge Point S86): This area collects drainage in ditches on both sides of the railroad and sheet flow from the following locations: the west side of the 230 kV Switchyard, all of the Measurement and Regulator (M&R) Station (measures natural gas flows), west of the light oil containment tanks, the "Old" Combustion Turbines' parking lot, and the Main Entrance and discharges to mouth of Quantico Creek. This area is approximately 34.6 acres and estimated 5 % impervious (road, parking lot) and 95% pervious (gravel, grass, vegetated slopes). Dominion believes the storm water collected at the Outfall 086 would be more representative of the runoff from the railroad than from the station's operations (please refer to enclosed site map). Since the monitoring would not be representative of storm water quality from station operations, Dominion requests storm water monitoring requirements not be applied to Outfall 086.

Outfall 095 (Discharge Point S95): The drainage area consists of multiple ditches and graded surfaces at the north end of the station and discharge to the Potomac River. The drainage area is approximately 2.6 acres, which is estimated to be 10% impervious (road, parking lot) and 90% pervious (gravel, grass, vegetated slopes). The main industrial activities associated with the area includes general refuse and scrap metal dumpsters.

Outfall 107 (Discharge Point S107): Collects storm water from the exterior berm associated with the Ash Pond D, which drains into two drop inlets and discharges to Quantico Creek. This outfall was also designed to collect uncontaminated groundwater infiltration from the Pond's berm for stabilization. This outfall was sampled to characterize the groundwater discharge. The area is approximately 14.4 acres and is estimated to be 100% pervious (grass, vegetative slopes). Since this Outfall's drainage area does not include industrial exposed materials or activities, Dominion requests the VPDES storm water monitoring requirements not be applied to Outfall 107.

In summary, Dominion is requesting Outfall 005 be representative of Outfall 031, Outfall 061 be representative of Outfalls 036 and 037, and Outfall 042 be representative of Outfalls 049 and 077. Due to the lack of storm water exposures and industrial activities in the drainage

Mrs. Mackert June 29, 2012 Page 4

areas, Dominion requests the following outfalls be identified as storm water conveyance with no storm water monitoring requirements: Outfalls 078, 079, 080, 094 and 107. Should you require additional information, please contact Rick Woolard at (804) 273-2991 and/or Jeff Marcell at (703) 609-3813.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Cathy C. Taylor

Director, Electric Environmental Services

Enclosure





BY U.S MAIL RETURN RECEIPT REQUESTED

June 11, 2012

Ms. Susan Mackert DEQ-Northern Regional Office 13901 Crown Court Woodbridge, VA 22193



RE: <u>Dominion Possum Point Power Station</u>

VPDES Permit No. VA0002071 Permit Reissuance Application Addendum #1

Dear Ms. Mackert:

Dominion is submitting this reissuance application addendum to request a change to Outfall 007. As discussed with you on May 30, 2012, Dominion is proposing to split the existing Outfall 007 into two separate outfalls. Outfall 007 currently discharges intake screen backwash water from Units 1-4. The outfall is located on the corner of the Units 1-2 intake structure. Backwash water from the Units 3-4 intake is currently delivered to the outfall by an above ground trough. The trough and associated access walkway have suffered storm damage. Dominion proposes to remove these structures and discharge the Units 3-4 screen backwash water at a new outfall located on the Unit 3-4 intake structure. The nature and total volume of the backwater water will not change.

The following revised application information is attached to assist your review:

- 1. EPA Form 2C page 1: Outfall 007 has been revised and Outfall 009 has been added.
- 2. Water Flow Balance Line Diagram: Outfall 009 has been added. The dashed line from the Seal Pit to Outfall 007 has been removed.
- 3. Discharge Outfalls Locations Aerial View: Outfall 009 has been added and Outfall 007 has been moved slightly to reflect accurate location.

If you have any questions or require additional information, please contact Oula Shehab-Dandan at (804) 273-2697 or via email at oula.k.shehab-dandan@dom.com.

I certify under penalty of law that this document and all information submitted were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly

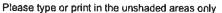
responsible for gathering information, the information submitted is to the best of my knowledge, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify that I am an authorized signatory as specified in the Ground Water Withdrawal Permit Regulation 9 VAC 25-610-10 et seq.

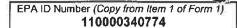
Sincerely,

Cathy C. Taylor

Director, Electric Environmental Services

Attachments





Form Approved OMB No. 2040-0086 Approval expires 3-31-98.

Form

NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS Consolidated Permits Program

-	nHeall.	Location
I. VI	uuau	COGMICIL

008

009

	0.0						name of the receiving water.			
A. OUTFALL NUMBER	Е	I. LATITIUDI	E	C	. LONGITUE)E	D. RECEIVING WATERS (name)			
(iist)	1. Deg	2. Min	3. Sec	1. Deg	2. Min	3. Sec	D. RECEIVING WATERS (Halle)			
001	38	32	12	77	17	00	Quantico Creek			
002	38	32	12	77	17	00	Quantico Creek			
(201)	38	32	11	77	16	57	Internal discharge to Outfall 001/002			
(202)	38	32	11	77	16	57	Internal discharge to Outfall 001/002			
003	38	32	17	77	16	58	Quantico Creek			
004	38	31	57	77	17	04	Mouth of Quantico Creek			
005	38	32	10	77	12	36 ,	Tributary to Quantico Creek			
(501)	38	32	58	77	17	20	Internal discharge to Outfall 005			
(502)	38	32	42	77	16	40	Internal discharge to Outfall 005			
007	38	32	9	77	16	47	Potomac River			

32 II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

32

10

11

77

77

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16

46

45

Potomac River

Potomac River

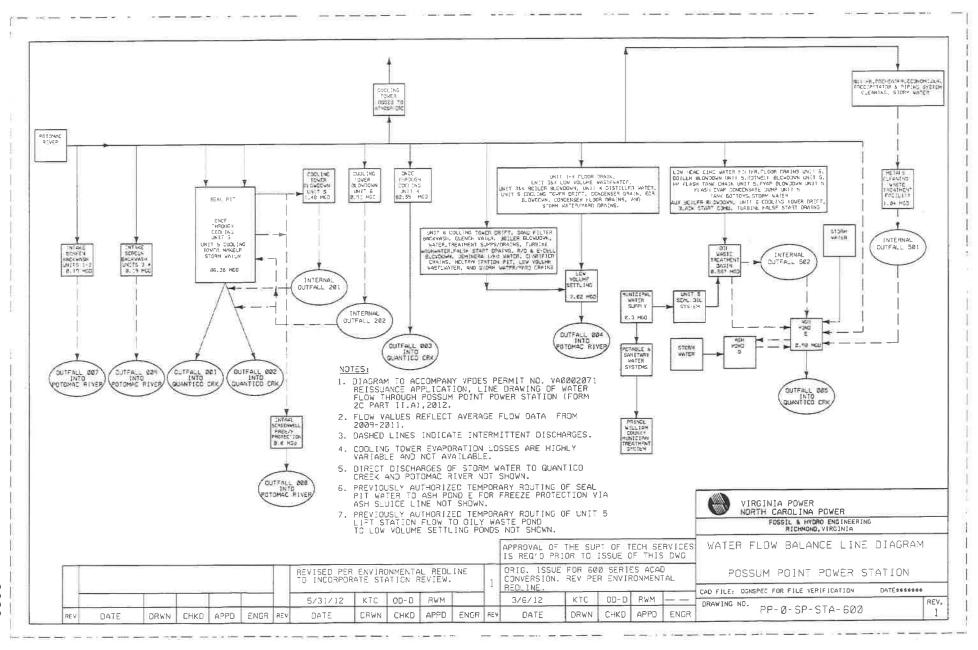
B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

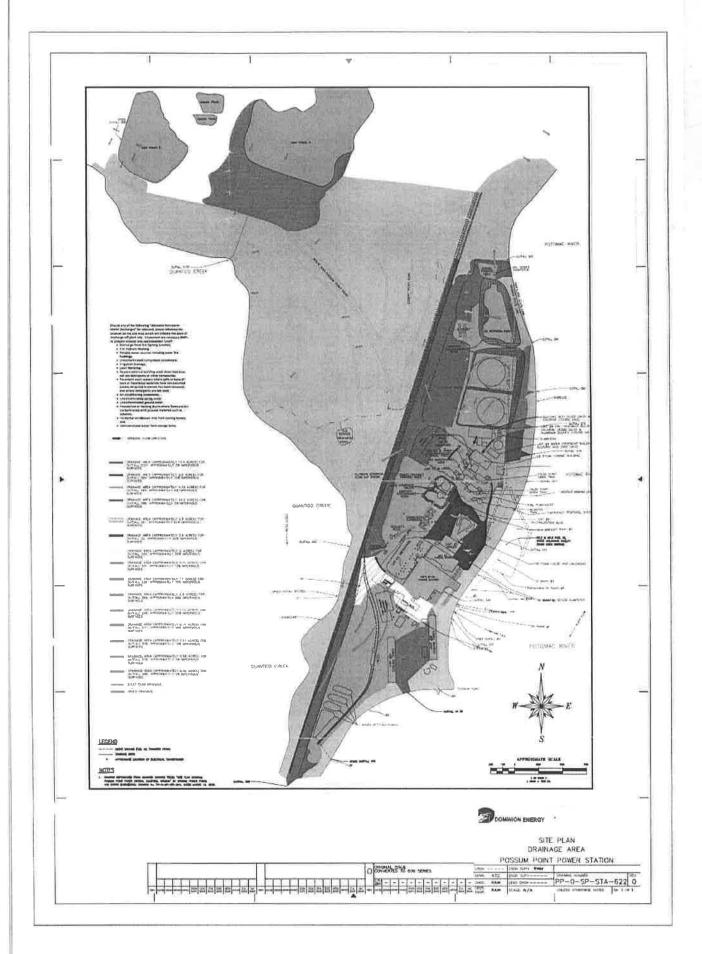
1. OUTFALL ND. (list) 001 002 (201) (202)	2. OPERATION(S) CONTRIBUTING FLO	3. TREATMENT				
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1		
001	Condenser Cooling Water & Cooling Tower Blowdown Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown), Storm Water	22.22.22	Mixing / Discharge to surface Water	1-0	4-A	
002	Condenser Cooling Water & Cooling Tower Blowdown Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown)	86.38 MGD	Mixing / Discharge to surface Water	1-0	4-A	
(201)	Cooling Tower Blowdown Source: Unit 5	1.48 MGD	DechlorInation/Sedimentation/	2-E 1-O	1-0	
(202)	Cooling Tower Blowdown Source: Unit 6	0.91 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-0	
003	Condenser Cooling Water Source: Unit 4	82.55 MGD	Discharge to surface Water	4-A	_	
004	Low Volume Waste Settling Pond Sources: Unit 5 Cooling Tower Drift, Yards Drains, Floor Drains, Unit 5 Circulating water, Units 1-4 Sand Filter Backwash, Filter Purge, Unit 6 Wash Water, EDR Backwash, Neutralization Sump, Storm Water	2.02 MGD	Sedimentation/ Flocculation/ Skimming/ Neutralization/ Chemical Precipitation/ Mixing/ Discharge to Surface Water	1-U X-X 2-C 4-A	1-G 2-K 1-O	
005	Ash Pond E Source: Ash Pond D Discharge, Tank Bottoms, Storm Water, Potomac River Intake Water, Outfalls 501 and 502 discharges	0.98 MGD	Sedimentation/ Mixing/ Skimming/ Discharge to Surface Water	1-U 1-O	X-X 4-A	
(501)	Metals Cleaning Waste Treatment Basin Source: Boilter Wash water, Air Preheater Rinse, Precipitator Rinse, Storm Water	1.04 MGD	Mixing/ Neutralization/ Chemical Precipitation/ Sodimentation/	1-O 2-C	2-K 1-U	
(502)	Olly Waste Treatment Basin Source: Unit 5 wastewater from various operations, Oil Unloading and Handling System Wastewater, Tank Bottoms, Auxiliary Boiler blow down, Unit 6 Cooling Tower drift, False Start Drains, Storm Water	0.57 MGD	Mixing/ Sedimentation/ Skimming	1-0 X-X	1-ນ	
007	Intake Screen Backwash Water Source: Units 1-2 Cooling Water Intake Structures	0.19 MGD	Mixing / Discharge to surface Water	1-0	4-A	
800	Intake Screenwell Freeze Protection Water Source: Non Contact Cooling Water	0.0 MGD	Mixing / Discharge to surface Water	1-0	4-A	
009	Intake Screen Backwash Water Source: Units 3-4 Cooling Water Intake Structures	0.19MGD	Mixing / Discharge to surface Water	1-0	4-A	

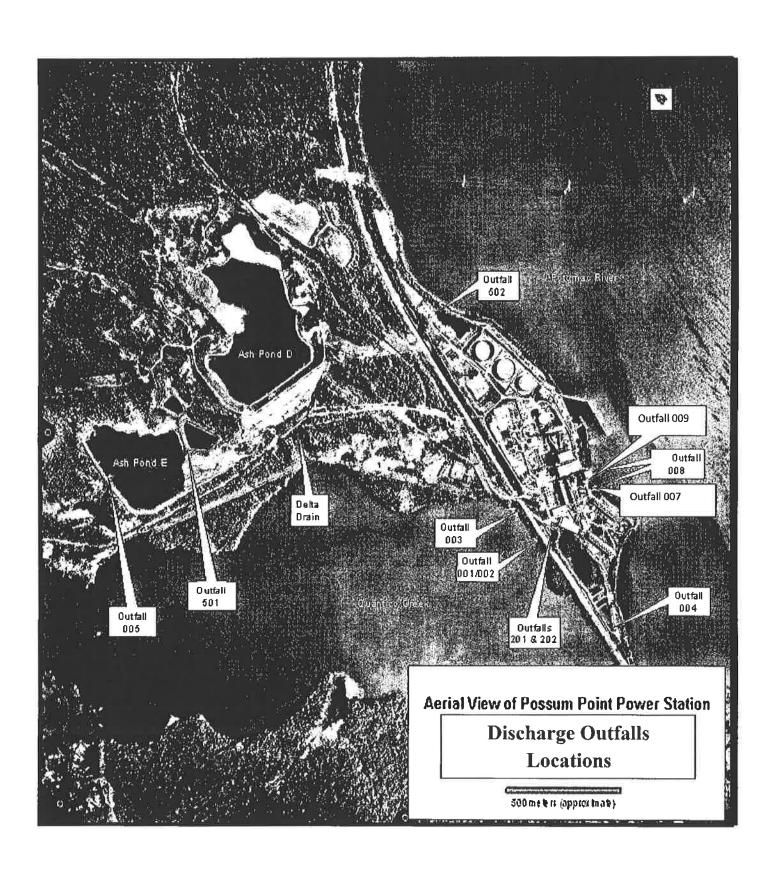
CIAL USE ONLY (effluent guidelines sub-categories)

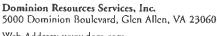
()= internal outfall

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.









Web Address: www.dom.com

BY U.S. MAIL-RETURN RECEIPT REQUESTED

April 5, 2012

Ms. Susan Mackert Department of Environmental Quality Northern Regional Office 13901 Crown Court Woodbridge, VA 22193





RE: **Dominion Possum Point Power Station**

Application for Reissuance of VPDES Permit No. VA0002071

Dear Ms. Mackert:

I am pleased to submit our application for renewal of VPDES Permit No. VA0002071 for the Possum Point Power Station. The enclosed documents include completed application forms, maps, addendum, permit billing information, and public notice authorization.

This application was prepared based on current state requirements. The above referenced permit expires on October 23, 2012, and consequently, this application for reissuance must be filed by April 26, 2012.

As required by the Clean Water Act 316(b) regulations (40 CFR Part 125, Subpart J) and by Part I.E.12 of the 2007 VPDES permit, we submitted to the DEQ on October 13, 2008 the Impingement Mortality Characterization Study for Possum Point Power Station.

Also, we submitted the Thermal Mixing Zone Modeling Report for the Possum Point Power Station as required by Part I.E.9 on October 7, 2011. Results of the modeling indicate that the current mixing zone remains appropriate for station operations.

Should you have any questions and/or require additional information, please contact Oula Shehab-Dandan at 804-273-2697 or via email at oula.k.shehab-dandan@dom.com.

Sincerely,

Director, Electric Environmental Services

Attachment

Form 1 General Information

FORM
1
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U.S. ENVIRONMENTAL PROTECTION AGENCY

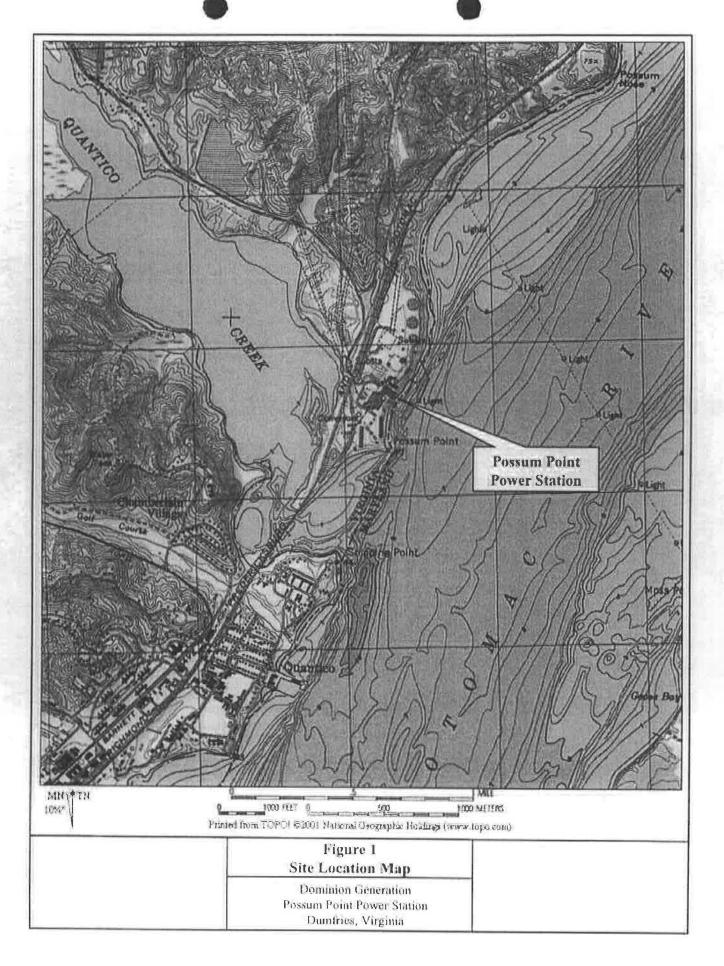
GENERAL INFORMATION

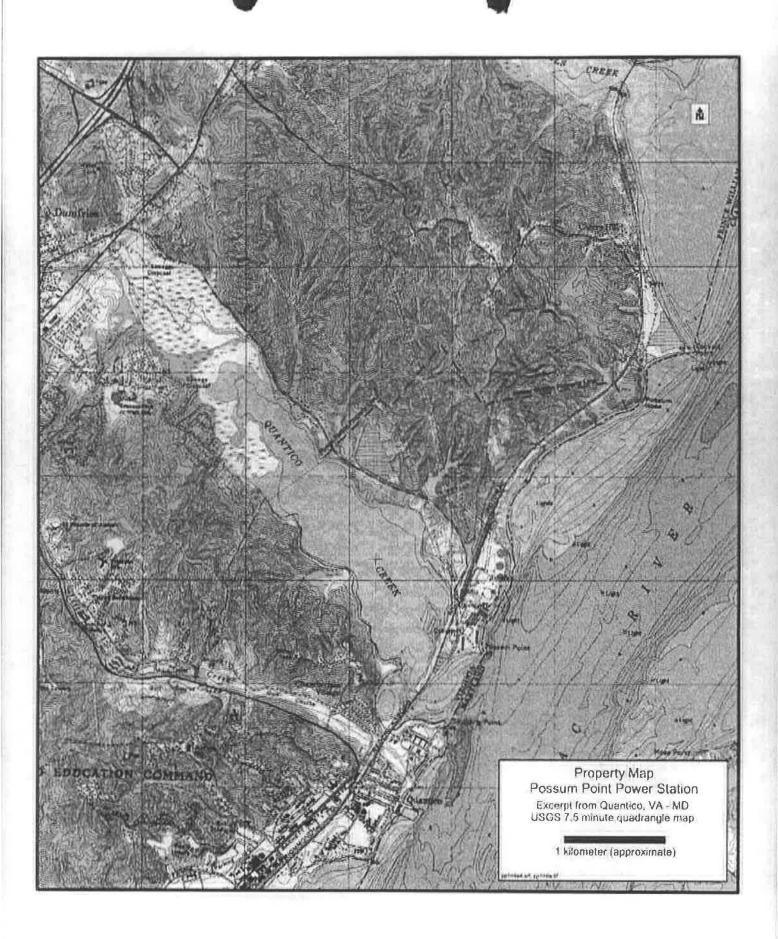
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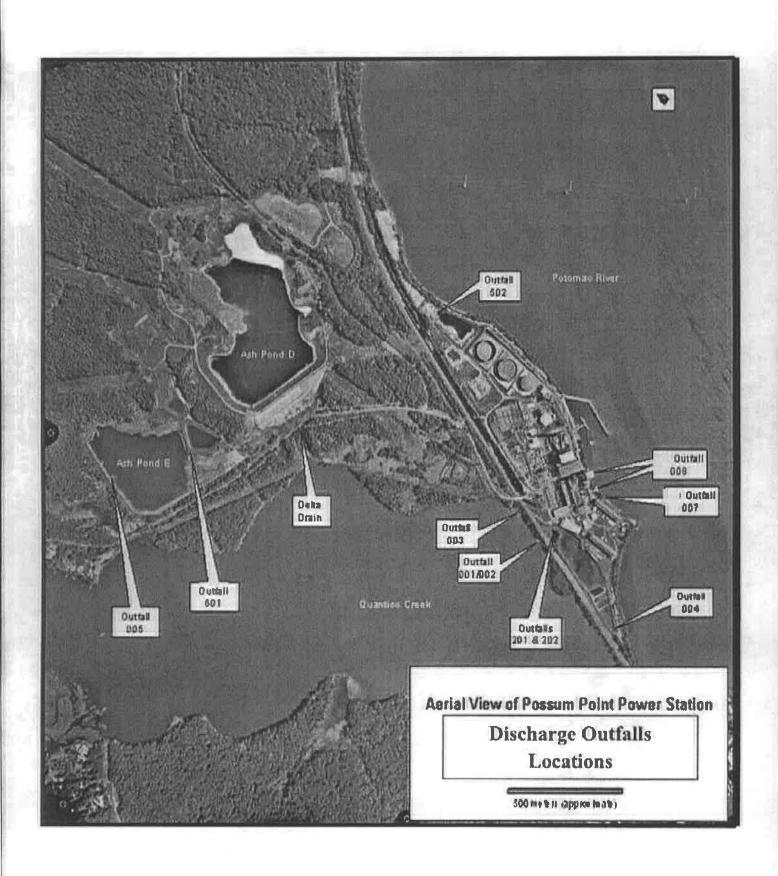
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IV. FACILITY L	OCATION									tab det	completed regardless). Complete all items if no label has been proved. Refer to the instructions detailed item descriptions and for the legal authorization under which this data is collected.						
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water other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)						special processes such as mining of sulfer by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)							}				
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CONTINUED FROM THE FRONT	17		
VII. SIC CODES (4-digit, in order of priority)	B SECOND		
A. FIRST	B. SECOND 7 (specify)		
7 Electric Services	7 15 16 19		
C. THIRD		D. FOURTH	
C (specify)	7 122	ecify)	
VIII. OPERATOR INFORMATION	15 16 19		
A. N.	AME		B. Is the name listed in Item
C Virginia Electric & Power Co.			VIII-A also the owner?
18 19		55	
C, STATUS OF OPERATOR (Enter the appropriate letter into F = FEDERAL M = PUBLIC (other than federal or state)	o the answer box; if Other, specify.) P (specify)	S 804	(area code & no.)
S = STATE O = OTHER (specify) P = PRIVATE	56	A 16 18	19 21 22 25
E. STREET OR PO BOX			
5000 Dominion Boulevard			
F. CITY OR TOWN	G. STATE H. ZIP CODE	IX. INDIAN LAND	
Glen Allen	VA 23060	Is the facility located	on Indian lands?
B 15 16 40	42 42 47 51	YES	NO NO
X. EXISTING ENVIRONMENTAL PERMITS		1 9%	
A. NPDES (Discharges to Surface Water) C T VA0002071	D. PSD (Air Emissions from Prop		
9 N VA0002071	9 P 1100 V141(070)	30	
B. UIC (Underground Injection of Fluids	E. OTHER (specify		pecify)
C T 1	9 - a	0707	
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C. RCRA (Hazardous Wastes) C	E. OTHER (specify	(5)	pecify)
9 R 7.000020110	9 15 16 17 18	30	
XI. MAP			10 11 11 11 11 11 11
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must			
show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs,			
rivers and other surface water bodies in the map are	ea. See instructions for precise re		
XII. NATURE OF BUSINESS (provide a brief de		T1 1 1 11	
Possum Point is an existing gas and oil fired stea	am electric generating station. The principal water discharge	The majority of the	facility is located in
Prince William County near the town of Dumfries. The principal water discharges enter Quantico Creek. An oil unloading dock and two cooling intake structures originate from the Virginia shoreline of the Potomac River and extend into the			
Maryland waters of the Potomac River.			
		lië	
VIII CERTIFICATION (see frequentians)			=1
XIII. CERTIFICATION (see instructions)	evamined and am familiar with th	a information submitt	ed in this application and
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in			
the application, I believe that the information is tru	ie, accurate and complete. I am		
submitting false information, including the possibility A. NAME & OFFICIAL TITLE (type or print)	of fine and imprisonment. B. SIGNATURE	No	C. DATE SIGNED
	() 11an		
C. D. Holley, VP Fossil & Hydro System Operations	(1) Isolle	4	04/05/2012
COMMENTS FOR OFFICIAL USE ONLY			
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Form 2C

Application for Permit to Discharge Wastewater for Existing Manufacturing, Commercial Mining, and Silvicultural Operations



EPA ID Number (Copy from Item 1 of Form 1) 110000340774 Form Approved OMB No. 2040-0086 Approval expires 3-31-98.

Please type or print in the unshaded areas only

2C NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS Consolidated Permits Program

I. Outfall Location							
For each outfall, list the	latitude an	d longitude d	of its location	n to the near	est 15 secon	ds and the n	ame of the receiving water.
A. OUTFALL NUMBER	Ε	. LATITIUD	Ē	С	. LONGITUD	E	D. RECEIVING WATERS (name)
(list)	1. Deg	2. Min	3. Sec	1. Deg	2. Min	3. Sec	
001	38	32	12	77	17	00	Quantico Creek
002	38	32	12	77	17	00	Quantico Creek
(201)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
(202)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
003	38	32	17	77	16	58	Quantico Creek
004	38	31	57	77	17	04	Mouth of Quantico Creek
005	38	32	10	77	12	36	Tributary to Quantico Creek
(501)	38	32	58	77	17	20	Internal discharge to Outfall 005
(502)	38	32	42	77	16	40	Internal discharge to Outfall 005
007	38	32	9	77	16	47	Potomac River
800	38	32	10	77	16	46	Potomac River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL	2. OPERATION(S) CONTRIBUTING FLO	DW	3. TREATM	MENT	
NO. (list)	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION		DES FROM E 2C-1
001	Condenser Cooling Water & Cooling Tower Blowdown Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown), Storm Water	86.38 MGD	Mixing / Discharge to surface Water	1-0	4-A
002	Condenser Cooling Water & Cooling Tower Blowdown Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown)	00.36 MGD	Mixing / Discharge to surface Water	1-0	4-A
(201)	Cooling Tower Slowdown Source: Unit 5	1.48 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-U
(202)	Cooling Tower Blowdown Source: Unit 6	0.91 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-0
003	Condenser Cooling Water Source: Unit 4	82,55 MGD	Discharge to surface Water	4-A	-
004	Low Volume Waste Settling Pond Sources: Unit 5 Cooling Tower Drift, Yards Drains, Floor Drains, Unit 5 Circulating water, Units 1-4 Sand Fifter Backwash, Fliter Purge, Unit 6 Wash Water, EDR Backwash, Neutralization Sump, Storm Water	2.02 MGD	Sedimentation/ Flocculation/ Skimming/ Neutralization/ Chemical Precipitation/ Mixing/ Discharge to Surface Water	1-U X-X 2-C 4-A	1-G 2-K 1-O
005	Ash Pond E Source: Ash Pond D Discharge, Tank Bottoms, Storm Water, Potomac River Intake Water, Outfalls 501 and 502 discharges	0.98 MGD	Sedimentation/ Mixing/ Skimming/ Discharge to Surface Water	1-U 1-O	X-X 4-A
(501)	Metals Cleaning Waste Treatment Basin Source: Boiler Wash water, Air Preheater Rinse, Precipitator Rinse, Storm Water	1.04 MGD	Mixing/ Neutralization/ Chemical Precipitation/ Sedimentation/	1-0 2-C	2-K 1-U
(502)	Olly Waste Treatment Basin Source: Unit 5 wastewater from various operations, Oll Unloading and Handling System Wastewater, Tank Bottoms, Auxiliary Boller blow down, Unit 6 Cooling Tower drift, False Start Drains, Storm Water	0.57 MGD	Mixing/ Sedimentation/ Skimming	1-O X-X	1-U
007	Intake Screen Backwash Water Source: Units 1-4 Cooling Water Intake Structures	0.37MGD	Mixing / Discharge to surface Water	1-0	4-A
800	Intake Screenwell Freeze Protection Water Source: Non Contact Cooling Water	0.0 MGD	Mixing / Discharge to surface Water	1-0	4-A

OFFICIAL USE ONLY (effluent guidelines sub-categories)

()= internal outfall

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C Event for			enille are	any of the discharge	se described in the	ms II-A or R inter	mittent or seaso	onal?			
	_	om, leaks, or oplete the follo		any or the discharge	sa described in lie	NO (go to		rii sal I			
					3. FRE	QUENCY			4. FLOW		
			PERATION		a, DAYS PER WEEK	b. MONTHS	a. FLOW F	IATE (in mgd)	B. TOTAL (specify w		
1. OUTFALL NUMBER (list)		CONTR	(list)	-LOVV	(specify average)	PER YEAR (specify average)	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMI DAILY	C. DURATIO N (in days)
201		Tower Blow		tion)	2	2	1.48	5.8	1.48	5.8	<7
501	Metals C	leaning Wa	ste Treatn	ent Basin	1	1	1.04	1.2	1.04	1.2	<5
502	Olly Was	ste Treatme	nt Basin	1,010	1	1	0.57	0.57	0.57	0.57	<3
008		creenwell F	reeze Prot	ection Water*	*		0.0	0.0	0.0	0.0	-
	,	-			*No Discharg	ge in 2009-2011			Unit=(million gallons)	Unit=(mill gallons	ion
III. PRODUC	TION				***						
A. Does an e	ffluent gul	deline iimitati	on promul	gated by EPA under	r Section 304 of th	e Clean Water A	ct apply to your	facility?			
[mplete Item				NO (go to					
B. Are the lin	_			guldeline expressed	d in terms of produ			tion)?			
		mplete item				NO (go to					
C. If you ansi effluent guide	wered "yes eline, and i	" to Item III-E ndicate the a	3, list the q ffected out	uantity which repre	sents an actual me	easurement of yo	ur level of produ	action, expressed	d in the terms and u	ınits used in	the applicable
				1. AVERAGE DAIL	Y PRODUCTION				2. AFFE	CTED OU	TFALLS
a. QUANTI		b. UNITS C	F MEASU	RE	c. OPER	ATION, PRODUC		(list outfall numbers)			
1232						(specif	<u> </u>				
IV. IMPROVEMI	ENITO										
A. Are you r	now require	es or any oth	ner environ	ate or local authori mental programs w cement compliance	hich may affect th	ne discharges de:	scribed in this a	pplication? This I	ncludes, but is not	ns of waste limited to, p	ewater treatment ermit conditions,
]	_	mplete the fo				NO (go to iter					
	NTIFICATION OF 2. AFFECTED OUTFALLS 3. BRIEF DESCRIPTION OF PROJECT 4. FINAL COMPLIANCE DATE OF THE PROJECT A. FINAL COMPLIANC							IANCE DATE			
	ETC.		a. NO.	b. SOURCE OF I	DISCHARGE			****	a. REQ	UIRED	b. PROJECTED
			100		22220	-			_		
				ets describing any a cate whether each							
	MARI	Y"X" IF DES	CRIPTION	OF ADDITIONAL	CONTROL PROG	RAMS IS ATTAC	CHED				
EPA Form	3510-2c (Rev. 8-90)			Page	2 of 4	-		CONTINU	E ON NEX	T PAGE

EPA ID Number (copy from Item 1 of Form 1) 110000340774

V. INTAKE AND EFFLUENT CHARACTERIS										
A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided. NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9. D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged.										
 Use the space below to list any of the po from any outfall. For every pollutant you list, I 	llutants listed in Table 2c-3 of the instruction oriefly describe the reasons you believe it to	ons, which you know or have reason to bell be present and report any analytical data in	eve is discharged or may be discharged in your possession.							
1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE							
See Addendum to Form 2C										
See Addendam to Form 20										
	*									
1										
1										
VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS										
		currently use or maguifacture as an interme	idiate or final product or byproduct?							
Is any pollutant listed in Item V-C a substance	e or a component of a substance which you		ediate or final product or byproduct?							
	e or a component of a substance which you	currently use or manufacture as an interme O (go to Item VI-B)	ediate or final product or byproduct?							
Is any pollutant listed in Item V-C a substance	e or a component of a substance which you		diate or final product or byproduct?							
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants is See addendum to Form 2C for addition	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants in See addendum to Form 2C for additions)	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants is See addendum to Form 2C for addition	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants is See addendum to Form 2C for addition	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants is See addendum to Form 2C for addition	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (Itst all such pollutants is See addendum to Form 2C for addition	e or a component of a substance which you below)	O (go to Item VI-B)								
Is any pollutant listed in Item V-C a substance YES (list all such pollutants in See addendum to Form 2C for additional see additional	e or a component of a substance which you below)	O (go to Item VI-B)								

CONTINUED FROM THE FRONT				
VII. BIOLOGICAL TOXICITY TESTING	DATA			
		onic toxici	ty has been made on any o	of your discharges or on a receiving water in
YES (identify the test(s) an	nd describe their purposes below)		NO (go to Section VIII)	A
The biological toxicity tactin	BIOLOGICAL TOXICITY TESTING DATA put have any knowledge or reason to lesilive that any biological test for acute or circuits foolidly has been made on any of your discharges or on a receiving water in ton to your discharges within the last 3 years? VES (identify the rest(r) and describe their purposes below) NO (go to Section PIII) PUSE (identify the rest(r) and describe their purposes below) NO (go to Section PIII) PUSE (identify the sett of the many address, and set performed by a contract laboratory or consulting firm? VES (ident the name, address, and set performed by a contract laboratory or consulting firm? VES (ident the name, address, and set performed by a contract laboratory or consulting firm? A NAME B, ADDRESS C, TELEPHONE (area code & no.) A NAME B, ADDRESS C, TELEPHONE (area code & no.) D, POLIUTANTS ANALYZED (int) astal Bioanalysts, Inc. 6400 Enterprise Court, Gloucester, VA 23061 (304) 694-8285 Whole Effluent Toxicity ce Analytical Services Inc. 1638 Roseytown Road Greensburg, PA 15001 (724) 859-5690 TOXAL Section PIII) BODD, Toxicity Whole Effluent Toxicity (26) Gross Alpha, Gross Beta, Radium-226, Radium 228, Strontium 99, Trittum 17423 Lee Davis Road Mechanicsville, VA 231111 (864) 559-9004 BODD, Trittum, Bromide, Color, MBAS BODD, Televisides, Herbicides, Cyanide, Hydrogen Sulfide, Chromium, Bromide, Color, MBAS ERRIFICATION With under pennity of law that link document and all attachments were propered under my direction or supervision in accordance with a system designed to assure that lifted personnel properly gather and evaluate the information submitted Based on my inquity of the penson or pensons who mange the system of those persons deneity analysis for year households for pelmoration, including the possibility of the penson or pensons who mange the system or those persons deneity and pensons or pensons who mange the system or those persons deneity and pensons or pensons who mange the system or those persons deneity and pensons or pensons who mange t			
VIII. CONTRACT ANALYSIS INFORMATION Were any of the analyses reported in Rem V performed by a contract laboratory or consulting firm? YES (identify the tentify) and describe their purposes below) Were any of the analyses reported in Rem V performed by a contract laboratory or consulting firm? YES (identify the tentify) and describe their purposes below) Were any of the analyses reported in Rem V performed by a contract laboratory or consulting firm? YES (identify the tentify) and describe their purposes below) Were any of the analyses reported in Rem V performed by a contract laboratory or consulting firm? YES (identify the tentify) and the substitutes, and telephone number of, and pollutarids analyzed by, each such In NO (no to Section IX) A NAME				
BIOLOGICAL TOXICITY TESTING DATA 2 you have any knowledge or man on believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water intention to your discharge within the lest 3 years?				
VIII. CONTITACT AMALYSIS INFORMATION Were any of the analyses exponed in item? Performed by a contract laboratory or consulting firm? VIII. CONTITACT AMALYSIS INFORMATION				
VIII. CONTRACT AMALYSIS INFORMATION Were any of the analysis and selection of the DEQ and are available upon request. VIII. CONTRACT AMALYSIS INFORMATION Were any of the analyses reported in the DEQ and are available upon request. VIII. CONTRACT AMALYSIS INFORMATION Were any of the analyses reported in the DEQ and are available upon request. VIII. CONTRACT AMALYSIS INFORMATION Were any of the analyses reported in the Part of the propers below the province of the propers below the province of the analyses and telephone number of, and pollutaris analysed by, each such local contract of the analyses and telephone number of, and pollutaris analysed by, each such local contract of the analyses, and telephone number of, and pollutaris analysed by, each such local contract of the analyses, and telephone number of, and pollutaris analysed by, each such local contract of the analyses of the analyses, and telephone number of, and pollutaris analysed by, each such local contract of the analyses				
Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the 3 years? YES (identify the rest(t) and descrite their purposes believe)				
7 11 11 11 11 11 11 11 11 11 11 11 11 11				D. POLLUTANTS ANALYZED (list)
			(area code & no.)	700
Coastal Bioanalysts, Inc.	6400 Enterprise Court, Gloucester, VA 2	3061	(804) 694-8285	Whole Effluent Toxicity
Pace Analytical Services Inc.			(724) 850-5600	226, Radium 228, Strontium
Primary Laboratories, Inc.			(804) 559-9004	Cyanide, Hydrogen Sulfide, Chromium, Bromide, Color,
IX. CERTIFICATION				
qualified personnel properly gather and responsible for gathering the informati	d evaluate the information submitted. Based on my it ion, the information submitted is, to the best of my	inquiry of knowled	the person or persons who ige and belief, true, accura	manage the system or those persons directly
A. NAME & OFFICIAL TITLE (type or p	orint)	B. PHO	NE NO. (area code & no.)	
		(804)	273-3592	
C. SIGNATURE / 7 /1	å	D. DAT	E SIGNED	1

EPA Form 3510-2C(8-90)

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Addendum to Form 1 and Form 2C

POSSUM POINT POWER STATION ADDENDUM to Form 1 and Form 2C 2012 VPDES PERMIT RENEWAL APPLICATION

Form 1, Part II.E

The Possum Point Power Station ("Station") may temporarily store hazardous wastes for short periods in an accumulation area located inside the warehouse. However, hazardous wastes, if any, are stored in exempt quantities and/or will not be stored on site for more than 90 days. The normal generator status for the Station is conditionally exempt, small quantity generator.

Form 1, Part VIII

Possum Point Power Station is owned by Virginia Electric and Power Company and operated by Dominion Generation. The parent company of Virginia Electric and Power Company is Dominion Resources, Inc.

Form 1, Part X

All Virginia air pollution related permits are issued under Registration No. 70225. The Station holds Title V and PSD permits. From time to time, the Station holds various federal, state, and local environmental permits for short-term or minor activities. Examples of short-term or minor permits include wetland permits, land disturbing permits, building permits, burn permits, and dredge permits. The Station currently holds several permits for specific activities related to intake dredging. These permits can be provided upon request.

Form 1, Part XI

The attached topographic map, entitled *Property Map*, shows the entire Station property. The property boundary is shown on the north perimeter of the Station and continues along the water's edge along Quantico Creek and the Potomac River. The Station does not have underground injection wells, drinking water wells, or hazardous waste management facilities, except a temporary accumulation area located inside the warehouse. To supplement the property map, an aerial photograph is attached showing the outfall locations.

Form 1, Part XIII

C. Doug Holley, Vice President, is the signatory for the application. However, please contact either Oula Shehab-Dandan at 804-273-2697 or Jeff Marcell at 703-441-3813 if questions arise or additional information is needed.

Form 2C, Part II.A

A Water Flow Balance Line Diagram illustrating water flow at the Station does not depict water input from precipitation or provide values for steam or evaporative losses or municipal water flow.

The values provided on the line diagram are either long-term average flows determined from actual monitoring data or estimates of average flows based upon equipment capacities and normal operating schedules. The line diagram reflects flow pathways as of March 2012.

Form 2C, Part II.B

Historically, Outfall 001 was the non-contact condenser cooling water discharge from Units 1 and 2. The Units 1 and 2 intake structure withdraws water from the Potomac River using three-circulating water pumps. Historically, the water was used as condenser cooling water for Units 1, 2, and 3, and heated water was routed to the seal basin for discharge via Outfalls 001 and 002. The water in the seal basin discharges to Quantico Creek via Outfall 001 (southern pipe) and Outfall 002 (northern pipe). With the retirement of Units 1 and 2, only Unit 3 contributes cooling water to the seal basin. One intake pump is operated to maintain water level in the seal basin to support the withdrawal of makeup water from the seal basin for the Unit 5 cooling tower. Water for Unit 6 operations (cooling tower blowdown makeup, quench water, process water, etc.) is taken from circulating water withdrawn by the Units 1 and 2 intake pumps. There is no qualitative difference between the two cooling water discharges upon exiting the seal basin. For this reason, we refer to the discharge as Outfall 001/002 and perform sampling for the discharge in the seal basin. The average flow value reported in this application reflects the combined flows of the intake pumps minus the flow directed to Unit 6.

Outfall 201 is an internal discharge that consists of the intermittent Unit 5 cooling tower blowdown. The actual discharge point is inaccessible and is physically located downstream of the seal basin in the northern pipe of the Outfall 001/002 discharge. Makeup for the blowdown is the seal basin water and the circulating water flow from the Units 1 and 2 intake pumps. The Units 1 and 2 intake pumps must be operated to maintain sufficient seal basin water level and head pressure. VPDES samples for cooling tower blowdown are collected in the cooling tower basin prior to discharge.

Outfall 202 is an internal discharge that consists of the intermittent Unit 6 cooling tower blowdown. The actual discharge point is inaccessible and is physically located downstream of the seal basin in the northern pipe of the Outfall 001/002 discharge. Makeup for the blowdown is taken from the Unit 6 blowdown, which originates from the Units 1 and 2 intake structure. VPDES samples for cooling tower blowdown are collected from a specially installed sample tap immediately prior to discharge in the northern pipe of the Outfall 001/002 discharge.

Outfall 003 is the non-contact condenser cooling water discharge from Unit 4. This outfall is constructed in a manner that allows sampling at the end of the pipe.

Outfall 004 receives low volume waste streams from the Station, including wastewater contributions from Unit 6. The low volume waste pond complex currently has a design size and volume of 1.42 acres and 3.1 million gallons, respectively. The outfall structure is manually controlled and the pond system has a retention time in excess of 24 hours. Unit 6 contributes a dechlorinated wastewater flow to the low volume waste system. Chlorine monitoring data collected from the pond system show no detected chlorine in the Outfall 004 effluent. Unit 6 also contributes heated wastewater to the low volume waste system. Outfall 004 discharges into Quantico Creek within the thermal mixing zone for the Station. Based upon temperature data collected, there have been no exceedances of the 3 degrees C delta standard in Quantico Creek or the state water quality standard for temperature.

Outfall 005 is the Station's active ash pond and has a design size and volume of 40 acres and 260 million gallons, respectively. The pond was partially dredged in 2002 and the spoil was placed in Ash Pond D. The pond has a manually controlled discharge structure and a retention time in excess of 24 hours.

Outfall 501 is an internal discharge that receives metals cleaning wastewater. This system receives wastewater from metals cleaning operations of various systems, including boilers, air preheaters, electrostatic precipitators, economizers and heat exchangers, and piping systems. The cleaning agents include citric acid, EDTA, and water. The system is batch operated and has a retention time in excess of 24 hours.

Outfall 502 is the Oily Waste Treatment Basin and is an internal discharge that receives wastewater with variable amounts of oil residues from Unit 5, the oil unloading and handling system, and other systems. Outfall 502 also receives storm water runoff and low volume wastewater from Unit 5.

Outfall 007 consists of intake screen backwash. The source water for the intake screen backwash is intake water from the Potomac River that does not contact any process equipment. The backwash discharges to the Potomac River via the fish return line. This discharge results in no net increase of pollutants to the receiving stream (Potomac River).

Outfall 008 consists of discharge from the intake freeze protection system. The source water for the freeze protection system is derived from non-contact condenser cooling water. Outfall 008 is seasonal and only discharges during freezing/icy weather conditions in the winter. This discharge also results in no net increase of pollutants to the receiving stream (Potomac River).

Form 2C, Part II.C

Outfall 201 discharges when Unit 5 operates. On average, Unit 5 operates two days per week for approximately two months during the year.

Outfall 501 is a manual batch operation and typically operates about one day per week for approximately one month during the year.

Outfall 502 is also a manual batch operation. The discharge frequency for Outfall 502 is based primarily on Unit 5 operating demand and storm water runoff into the Oily Waste Treatment Basin. On average, Outfall 502 operates one day per week for approximately one month during the year.

Outfall 008 is a seasonal discharge. Outfall 008 only discharges in the winter when freeze protection is necessary due to icy weather conditions. Therefore, the discharge from Outfall 008 is highly variable. On average, Outfall 008 discharges seven days per week for approximately two months during the year. However during 2009-2011 there was no discharge from this outfall.

Form 2C, Part IV.A

Possum Point Power Station is not required by any federal, state, or local authority to meet any final implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other programs which may affect the discharges described in this application. However, Possum Point Power Station has previously

implemented voluntary improvements and continues to eliminate various sources of oil entering the Oily Waste Treatment Basin.

Form 2C, Part IV.B

In accordance with Part I A.10, A.11, and A.12 of the existing VPDES permit (Permit No. VA0002071), the Station monitors groundwater at specified observation wells associated with Ash Ponds D and E and the Oily Waste Treatment Basin. The existing VPDES permit requires annual groundwater monitoring at each of the specified observation wells associated with Ash Ponds D and E and the Oily Waste Treatment Basin.

Form 2C, Parts V.A, B, & C

The values are based on Discharge Monitoring Report (DMR) data collected over the past three years (2009-2011), and special samples collected on September 14 and October 6, 2011. The monitoring data for all current internal and external discharges reported on DMRs are summarized and reported in Part V of Form 2C. In addition, Dominion collected grab samples of the discharge from Outfalls 001/002, 003, 004, and 005 and analyzed the samples in accordance with the sampling plan and waiver request submitted on June 13, 2011 and approved by DEQ on July 27, 2011. Please note that Outfall 008 did not discharge during the permit term, therefore, no Form 2C Part V was included in this permit application

Form 2C, Part V.D

Numerous chemicals are used in minor and bulk amounts at Possum Point Power Station. A list of the bulk chemicals and their location is included in Section 4 of the attached Storm Water Pollution Prevention Plan. The amount of chemicals used per year is variable, so the amounts provided on the bulk chemical list are estimates. Certain chemicals have multiple uses and the stated purpose, treatment function, and outfall association is not preclusive of other purposes, functions, or association with specific outfalls. Upon request, Material Safety Data Sheets can be provided for all the chemicals on the list.

Form 2C, Part VII

A summary of the biological toxicity test data for the past four years (2007-2011) may be provided upon request.

In accordance with Sections C.1 and C.2 of our existing VPDES permit, the Station is currently conducting the following tests:

- 1) Annual acute and chronic toxicity testing on Outfall 001/002:
- 2) Annual acute and chronic toxicity testing on Outfall 003; and
- 3) Annual acute and chronic toxicity testing on Outfalls 004 and 005.

Form 2C, Part IX

C. Doug Holley, Vice President, is the signatory for the application. However, please contact either Oula Shehab-Dandan at 804-273-2697 or Jeff Marcell at 703-441-3813 if questions arise or additional information is needed.

Additional Information

In accordance with Section E.11 of the existing VPDES permit, Ash Pond D is approved as the Station's repository for dredge spoil, and we wish to continue this practice in the future. Section E.11.a currently allows us to use Ash Pond D as a repository for dredge spoil material and residuals removed from facilities, areas, and systems related to operation and maintenance of Possum Point Power Station. In addition, Section E.11.b allows the Station to use Ash Pond D as a repository for dredge spoil material that is not related to operations at Possum Point Power Station provided the material originated from the Potomac River Basin meeting the definition of state waters in Virginia. We request the flexibility to continue placement of dredge spoil material in Ash Pond D on an as-needed basis and, therefore, request no changes to Section E.11 of the existing VPDES permit.

BULK CHEMICAL LIST FOR 2012 POSSUM POINT VPDES PERMIT RENEWAL APPLICATION

Commercial or Generic Name of Chemical	Approx. Usage/Yr	Purpose and Treatment	Associated Outfall
Sulfuric acid	~ 150 tons	pH control in flash evaporator brine, cooling towers, demineralizer plant, and neutralization pit	001/002, 004, 005, 201, 202, 502
Betz KlarAid PC 1192	~ 19 tons	Coagulent	004, 501
Carbohydrazide, (Betz CorTrol OS 5607)	~ 27 tons	pH control, oxygen scavenger, metal passivator	004, 005, 502
Neutralizing amines compounds (ammonia hydroxide, cyclohexylamine, Morpholine soln.)	~ 15 tons	pH control in boiler feedwater cycle, HRSG	004, 005, 502
Soda ash	~ 5 tons	pH control - various station systems, acid neutralization	001/002, 004, 005, 201, 202, 502
Hydrated calcium lime	~ 63 tons	Acid neutralization in metals treatment pond & coal pile	004, 005, 501
Detergents/cleaning agents, phosphate free or citrus based.	~ 3 tons	General cleaning of various station equipment	all
Silicon emulsion, 10% dimethyl silicone, food grade	~ 1 ton	Antifoam agent for closed circulation cooling towers	001/002, 201, 202
Trisodium phosphate	~2 tons	Boiler pH control, water hardness reducer	004, 005, 502
Sodium hydroxide (caustic)	~ 5 tons	Boiler and neutralization pit pH control, RO cleaner	004, 005, 502
Tetrasodium EDTA	NA***	RO cleaning	004
Tetraammonium EDTA	~10-40 tons*	Boiler chemical cleaning*	501**
Sodium nitrite	~1-5 tons*	Boiler chemical cleaning*	501**
Cronox 240 Inhibitor	~200-500 lbs.*	Boiler chemical cleaning*	501**
Citric Acid	~10-40 tons*	Boiler chemical cleaning* RO Cleaning	004, 501**
Sodium hypochlorite	~360 tons	Water treatment, cooling tower antifoulant	004, 201, 202
Aluminum sulfate	~430 tons	Water treatment coagulant	004
Phosphates (di, tri, tripoly)	~2 tons	pH adjustment. water treatment	004, 005, 502
Sodium bisulfite	~57 tons	Dechlorination	001/002, 004, 201, 202
Ammonia hydroxide	~73 tons	NOX control in SCR system, water treatment/RO chem.	004, 005

Commercial or Generic Name of Chemical	Approx. Usage/Yr	Purpose and Treatment	Associated Outfall
Phosphonates and polyacrylate polymers	NA***	Scale inhibitor & dispersant in water treatment system	004
Sodium dodecylbenzene sulfonate	NA***	RO cleaning	004
Sodium hydrosulfite	NA***	RO cleaning	004
Sodium dodecylsulfate	~25 lbs	RO cleaning	004
Hydrochloric Acid	~1.5 tons	E Cell cleaning agent, EDR, RO cleaning agent	004
Salt/brine	~7 tons	E Cell/RO cleaning agent, EDR	004
Depositrol PY5201	N/A***	Cooling tower treatment	001/002, 202
Spectrus BD1500	N/A***	Cooling tower treatment	001/002, 202
Polyfloc AE1115	~24 tons	Water treatment flocculant	001/002, 004, 202
Polyfloc AE1128P	N/A***	Water treatment flocculant	001/002, 004, 202
Polyfloc AE1117	N/A***	Water treatment flocculant	001/002, 004, 202
Nalclear 7768	N/A***	Water treatment flocculant	004
Klaraid CDP1336, CDP1346	N/A***	Water treatment coagulant	001/002, 004, 202
Hypersperse MDC700	~1 ton	Water treatment/RO chem.	004
Conntect 6000	~0.6 ton	HRSG, turbine chemical	004
Propylene glycol	~2.5 tons	Freeze protection	004
Hydrogen peroxide	N/A***	Cleaning agent	001/002, 202
Kleen MCT411	~0.5 ton	RO Cleaning agent	004
Kleen MCT511	~0.5 ton	RO Cleaning agent	004
Kleen MCT103	~0.5 ton	RO Cleaning agent	004
Kleen MCT882	~0.5 ton	RO Cleaning agent	004
Biomate MBC2881	~1200 lbs	RO Cleaning agent	004
RoClean P303	~0.5 ton	RO Cleaning agent	004
RoClean P111	~0.5 ton	RO Cleaning agent	004
Spectrus OX103 (oxidizer)	~8 tons	Cooling tower circulating water treatment	201

^{*} Boilers are cleaned approx. every 3-5 years. Therefore, for most years the usage/year is 0.

^{**} EDTA boiler cleaning wastewater is sent off-site for treatment and disposal. Trace amounts may be present in discharge. Citric Acid boiler cleaning wash water (non-hazardous) may be sent to Metals Pond Treatment Facility (Outfall 501)

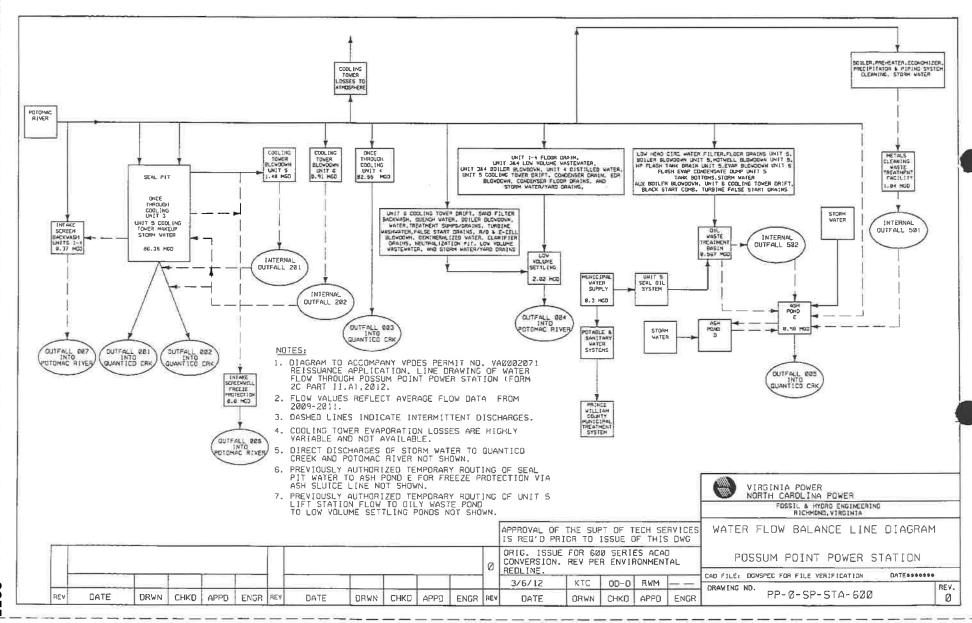
^{***} N/A = Not Available

STORAGE LOCATIONS OF BULK CHEMICALS AT POSSUM POINT POWER STATION

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Sulfuric acid	Warehouse, Unit 6 Water Treatment Bldg, Unit 6 Cooling Tower Bldg, Unit 6 Neutralization Pit, Unit 5 Basement	Yes
Betz KlarAid PC 1192	Metals Treatment Pond Area, Unit 5 Sand Filter Bldg	Yes
Carbohydrazide, (Betz CorTrol OS 5607)	Units 4 and 5 Basements	Yes
Neutralizing amines compounds	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements	Yes
Soda ash	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements, Unit 6 Neutralization Pit	Yes
Hydrated calcium lime	Warehouse	Yes
Detergents/cleaning agents, phosphate free or citrus based.	Facility-Wide (inside buildings)	Yes
Silicon emulsion, 10% dimethyl silicone, food grade	Warehouse, Unit 5 Cooling Tower Bldg, Unit 6 Cooling Tower Bldg	Yes
Trisodium phosphate	Warehouse, Unit 5 Cooling Tower Bldg, Units 3-5 Basements, Auxiliary Boiler Area	Yes
Sodium hydroxide (caustic)	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements	Yes
Tetrasodium EDTA	Temporarily stored on-site only as needed	Yes
Tetraammonium EDTA	Temporarily stored on-site only as needed	Yes
Sodium nitrite	Temporarily stored on-site only as needed	Yes
Cronox 240 Inhibitor	Temporarily stored on-site only as needed	Yes
Citric Acid	Temporarily stored on-site only as needed	Yes
Sodium hypochlorite	Warehouse, All Unit 6 Bldgs	Yes
Aluminum sulfate	Warehouse, Unit 6 Pretreatment Bldg	Yes

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Phosphates (di, tri, tripoly)	Warehouse, Unit 5 Cooling Tower Bldg, Units 3-5 Basements, Auxiliary Boiler Area	Yes
Sodium sulfite or Sodium bisulfite	Warehouse, All Unit 6 Bldgs, Unit 5 Sand Filter Bldg	Yes
Ammonia hydroxide	Warehouse, Unit 6 Water Treatment Bldg, Unit 6 Steam Turbine Bldg, Unit 6-A HRSG	Yes
Phosphonates and polyacrylate polymers	Warehouse, Units 3-5 Basements	Yes
Sodium dodecylbenzene sulfonate	Warehouse, Unit 6 Water Treatment Bldg	Yes
Sodium hydrosulfite	Warehouse, Unit 6 Water Treatment Bldg	Yes
Sodium dodecylsulfate	Warehouse, Unit 6 Water Treatment Bldg	Yes
Hydrochloric Acid	Unit 6 Water Treatment Bldg, Units 3 and 4 Basements	Yes
Salt/brine	Warehouse, Unit 6 Water Treatment Bldg, Units 3-5 Basements	Yes
Depositrol PY5201	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Spectrus BD1500	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Polyfloc AE1115	Warehouse, All Unit 6 Bldgs	Yes
Polyfloc AE1128P	Warehouse, All Unit 6 Bldgs	Yes
Polyfloc AE1117	Warehouse, All Unit 6 Bldgs	Yes
Nalclear 7768	Warehouse, All Unit 6 Bldgs	Yes
Klaraid CDP1336, CDP1346	Warehouse, All Unit 6 Bldgs	Yes
Hypersperse MDC700	Warehouse, All Unit 6 Bldgs	Yes
Conntect 6000	Warehouse, Unit 6-A and Unit 6-B HRSGs	Yes
Propylene glycol	Warehouse, Unit 6 Steam Turbine Bldg, Unit 5 Basement	Yes
Hydrogen peroxide	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Kleen MCT411	Warehouse, Unit 6 Water Treatment Bldg	Yes
Kleen MCT511	Warehouse, Unit 6 Water Treatment Bldg	Yes
Kleen MCT103	Warehouse, Unit 6 Water Treatment Bldg	Yes

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Kleen MCT882	Warehouse, Unit 6 Water Treatment Bldg	Yes
Biomate MBC2881	Warehouse, Unit 6 Water Treatment Bldg	Yes
RoClean P303	Warehouse, Unit 6 Water Treatment Bldg	Yes
RoClean P111	Warehouse, Unit 6 Water Treatment Bldg	Yes
Spectrus OX103	Unit 5 Cooling Tower Bldg (when used)	Yes



EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 001/002

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				EFFLUENT					3. UNITS (specify if blank)		4. INTAKE (optional)		
1 Pollutant	a, N	MAXIMUM DAY VALU)E	b MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if availale)		d, No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM AV	G VALUE	b. NO. OF
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON	0.10.50	(1) CONCENTRATION	(2) MASS	ANALYSES
a Biological Oxyge	geл Demand (BOD)	< 3.0	< 3069,954	T#2		: e	463	ì	РРМ	LBS/DAY	s 	*	-
b, Chemical Oxyge	en Demand (COD)	14,66	15001,84188	:47	V.	145	#3	Ĥ	РРМ	LBS/DAY	-	(##	-
c Total Organic Ca	arbon (TOC)	25.8	26401.6044		-		440	i	РРМ	LBS/DAY		F##	-
d. Total Suspended	1 Solids (TSS)	12.4	12689,1432				440	1	РРМ	LBS/DAY	-	144	-
e_Ammonia (as N))	0,07	71.63226	22	VA.	180		1	PPM	LBS/DAY	•		-
f. Flow		VALUE 122.	.7	VALUE		VALUE 86 38		36	MGD		VALUE		-
g. Temperature (wir	inter)	VALUE 15.5	5	VALUE -		VALUE -		1	°C		VALUE		
h. Temperature (siii	ımmer)	VALUE 39,1	1	VALUE -		VALUE		1	°C		VALUE		
i. pH		7,7	8.4		-			36	STANDAR	RD UNITS	32.36	海岸	W.

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK'X'			3. EF	FLUENT				UNITS (spec	ify if blank	5. INTA	KE (optiona	al)	
CAS NO. (If	b,			a, MAXIMUM [DAY VALUE	b. MAXIMUM 30 DA available		c, LONG TERM AV		d Na. OF	a.		2. LONG TERM AV	G VALUE	b. NO. OF
available)	Believed Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2)	(I) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATI ON	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	
a. Bromide (24959-67-9)	x		0,28	286.52904	<i>#</i>	271	· ==	**	1	PPM	LBS/DAY	2 11	2**	-	
b. Chlorine, Total Residual	X		< 0.1	< 102.3318	< 0,1	< 102.3318	< 0.1	< 72.04092	72	РРМ	LBS/DAY				
c. Color	х		20	=	S#.		-		1	PCU			-	-	
d, Fecal Coliform		x	No Sample	F-65		14.1	> -	**	6 €	8 <u>#</u>		#	344 -		
e. Fluoride (16984-48-8)	x		0.11	112.56498		-	at .		1	PPM	LBS/DAY		9.	-	
7. Nitrate - Nitrite (as N)	x		2.47	2527.59546	3	-	-	##1	1	РРМ	LBS/DAY		-		

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ITEM V-B CONTINUE	_	D17 130									OUTFALL NO.		41/ D (- 4)	15
	2.MA	RK 'X'			5. EI-F	LUENT	c. LONG TERM A	VC VALUE	d No. OF	UNITS (Spe	ecify if blank		AKE (optiona	1
NO (If available)	a Believed	b Believed	a, MAXIMUM	DAY VALUE	(if avoilable		(if availab		ANALYSES	CONCENTRA	b, MASS	a, LONG TERM A	VG VALUE	b. NO (
	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALY
GC/MS FRACTION	****			····										
g, Nitrogen, Total Organic <i>(as N)</i>	x		0.4	409_33	-		•	7 =	ī	РРМ	LBS/DAY	**	el .	
n, Oil & Grease	x		< 5	< 5116.59	=	-	-		1	PPM	LBS/DAY	 .	#10	
. Phosphorus (as P), Fotal (7723-14-0)	х		< 0.32	< 327.46176	-			·=	1	РРМ	LBS/DAY	•	***	
. Radioactivity														
(1) Alpha		x	0,646	1.5%	æ	π.	186	033	1	pCi/Ł	7	-	To:	=
(2) Beta		x	2.79	::•	·		366	-	1	pCi/L	••	-	#0	
(3) Radium, Total		x	-	024			154		l	pCi/L		34 3	200	
(4) Radium 226, Total		x	-	10.00	=:	-		(4	1	pCi/L	7	#	8	-
k, Sulfate (as SO ₄) [14808-79-8]	х		28.06	28714.30	-	**)	: :		t.	PPM	LBS/DAY	(**)	-	-
Sulfide (as S)	х		< 0.05	< 51.17	1441	2.	Tes	2002 San	ı	РРМ	LBS/DAY	(#)	=	-
m. Sulfite (as SO ₃) (14265-45-3)		х	No Sample	101	-	=	100	₩ \$			-	÷	*	-
n Surfactants	x		< 0.01	< 10.23	1991	***	·)##	1	РРМ	LBS/DAY	***	**	-
7429-90-5)	х		< 0.09	< 92.10	Saud .			844	ı	РРМ	LBS/DAY		**	
o Barium Total (7440-39-3)	х		0.043	44.00	### ##################################	€,		e e	£.	РРМ	1.BS/DAY	*	20	-
q. Boron, Total (7440- 42-8)	х		0,02	20.47	Less	=0	-	1999	1	PPM	LBS/DAY		**	
. Cobalt, Total (7440- 48-4)	х		0,0007	0.72		54);			1	PPM	LBS/DAY	:a:		-
5. Iron, Total (7439- 89-6)	х		0.42	429.79	.	₩.		42	ľ	PPM	LBS/DAY	==	- La	
. Magnesium, Total (7439-95-4)	х		8.04	8227,48		==:	· ·	=	ı	PPM	LB\$/DAY	3007	-	-
Molybdenum, Fotal (7439-98-7)	х		< 0.001	< 1.02	5 -	***	-	e-c	1	РРМ	LBS/DAY	3-1		
v. Manganese, Fotal (7439-96-5)	x		0.12	122.80	C47	125	-	3	ı	PPM	LBS/DAY	(4e)	122	-
v. Tin, Total (7440-	x		< 0.005	< 5.12	140	-	=	#0	1	PPM	1.BS/DAY	(20)	#	=
31-5) k. Titanium, Total (7440-32-6)	х		< 0.002	< 2.05		**			1	РРМ	LBS/DAY		:#-	

Ĭ	EPA 1.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO 001/002

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2, 4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe it will be discharged in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

	2	MARK	'X'				FFLUENT				4. U	NITS	5. INTA	KE (option	ial)
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	AY VALUE	b, MAXIMUM 30 I (if availa		c. LONG TERM A' (if availal		d No. OF	a. CONCENTR	1 14 05	a, LONG TERI VALUI		b. NO. OF
No (ii avanabic)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ATION	b. MASS	(I) CONCENTRATION	(2) MASS	ANALYSE
METALS, CYANIDE,	AND TOT.	AL PHEN	OLS						215,0						
IM. Antimony, Total (7440-36-0)	х	x		< 0.001	< 1.02	- ==	••3			ť	PPM	LBS/DAY	3 40 3	-	
2M. Arsenic, Total (7440-38-2	x	x		< 0,003	< 3.07	#4	H350			t)	PPM	LBS/DAY	***		
3M, Beryllium, Total (7440-41-7)	х	x		< 0.0002	< 0.20		193	æ	*	E.	PPM	LBS/DAY	. 60	353	-
4M. Cadmium, Total (7440-41-9)	х	x		< 0.0003	< 0.31	e.	1868	7 <u>20</u> 7		13	РРМ	LBS/DAY	ule:		ē
SM. Chromium, Total (7440-47-3)	x	х		< 0.001	< 1.02		i de		-	1,	РРМ	LBS/DAY		·	
6М. Соррет. Total (7440-50-8)	х	х		0.011	11.26		IHE?	1980	529	ñ	PPM	LBS/DAY	æ		
7M. Lead. Total (7439-92-1)	x	x		< 0.001	< 1.02		(RHC)	: :	**	1	РРМ	LBS/DAY		-	==
8M. Mercury, Total (7439-97-6)	x	х		< 0.0002	< 0.20		10 0	-	::	i	РРМ	LBS/DAY		3	
9M. Nickel, Total (7440-02-0)	х	x		< 0.005	< 5.12	==:		**	•	1	РРМ	LBS/DAY	**	.=	-
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 3.07	75N =	1979/	1 800		1	РРМ	LBS/DAY	**		
1 IM. Silver, Total (7440-22-4	х	х		< 0.0001	< 0.10	1	190	*		1.	PPM	LBS/DAY	E		e.
12M. Thallium, Fotal (7440-28-0)	х	x		< 0.0002	< 0,20	a a	241	2205		į.	PPM	LBS/DAY	€	-	-
13M. Zinc, Total (7440-66-6)	x	х		< 0.01	< 10.23		5 44 5	nam.	-	1	PPM	LBS/DAY		-	-
14M Cyanide, Total (57-12-5)	x	x		< 0.01	< 10.23		:(We):	1880		1	РРМ	LBS/DAY		2443	-
15M, Phenols. Fotal DIOXIN	x	х	-116.0	< 0.01	< 10.23	-			348	ī	PPM	LBS/DAY			

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Tetrachlorodibenzo-P

Dioxin (1764-01-6)

No Sample

DESCRIBE RESULTS

X

CONTINUED FROM PAGE V-3	2.	MARK	'X'			3. El	FFLUENT				UNITS (SC	OUTFALL NO. 0 ecify if blank		AKE (optic	onal)
1, Pollutant and CAS NO. (If	a.	b.	, c	a. MAXIMUM DA	Y VALUE	b. MAXIMUM VALUE (if ava	30 DAY	c LONG TERM A'		14, 05	a.	July II DIGHT	a. LONG TEI VALU	RM AVG	b NO
available)	Testing Required	Believed Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	CONCENTRA TION	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALY
GC/MS FRACTION - VOL	ATILE C	OMPO	UNDS	And the second s											
V. Accrolein [07-02-8)	х	x		< 0.01	< 10.23	P2			9. 11	1	PPM	LBS/DAY		. 25 0	
2V Acrylonitrile 107-13-1)	х	х		< 0.0015	< 1.53	027	22	-	14	1	PPM	LBS/DAY	4	24	-
3V. Benzene 71-43-2)	x	N		< 0.0044	< 4.50	#	-	*	17 4	l	РРМ	LBS/DAY	=	#5	122
IV, Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V_Bromoform 75-25-2)	x	х		< 0.0047	< 4.81	=	14		<u>.</u>	1	PPM	LBS/DAY	-	Each	
V. Carbon Fetrachloride \$6-23-\$)	x	х		< 0.0028	< 2,87		2	*	<u> </u>	1	РРМ	LB\$/DAY	12	2.	
7V. Chlorobenzene 108-90-7)	х	X		< 0.006	< 6.14	=	**	-		1	PPM	LBS/DAY		5.	-
V Chlorodibromomethane 124-48-1)	×	х		< 0.0031	< 3,17	-	040	*	3#K	t	РРМ	LBS/DAY	H A	weig	-
9V Chloroethane 75-00-3)	х	х		< 0.0011	< 1.13		æ≀.	***	## E	1	РРМ	LBS/DAY	201	m	-
0V. 2-Chloroethylvinyl Ether 110-75-8)	х	х		< 0.0012	< 1,23	-	##.i	-	w.	1	PPM	LBS/DAY	(B)		-
IV. Chloroform 67-66-3)	×	х		< 0.0016	< 1.64	E	93		₩)	1	РРМ	LBS/DAY		22	-
2V. Dichlorobromomethane 75-27-4)	x	x		< 0.0022	< 2.25		26	54	#	1	РРМ	LBS/DAY	24 ()		-
3V. Dichlorodifluoromethane 75-71-8)				Not Required		Not Required		Not Required							
4V. 1,1-Dichloroethane 75-34-3)	×	x		< 0.0047	< 4.81	-	#X		m X	1	РРМ	LBS/DAY			-
5V ₋ 1,2-Dichloroethane 107-06-2)	x	х		< 0.0028	< 2.87	=		277	*	1	PPM	LBS/DAY		+	22
6V. 1,1-Dichloroethylene 75-35-4)	x	x		< 0.0028	< 2.87	-		84	-	1	РРМ	LBS/DAY	-	*	
7V. 1,2-Dichloropropane 78-87-5)	×	х		< 0.006	< 6.14	**		-	-	1	РРМ	LB\$/DAY	-	96	-
8V, 1,3-Dichloropropylene 542-75-6)	x	х		< 0.0059	< 6.04	*	***	: 	=	1	РРМ	LBS/DAY	*	-	-
9V. Ethylbenzene 100-41-4)	×	х		< 0.0072	< 7.37	-	###	(==		ı	РРМ	LBS/DAY	3		-
DV. Methyl romide (74-83-9)	х	х		< 0.0014	< 1.43	-	#0	1944		1	РРМ	LBS/DAY	**	(#E)	
1V Methyl Chloride (74-87-3) PA Form 3510-2C (8-90)	х	х		< 0.0011	< 1:13	: :	##C		**	1	РРМ	LBS/DAY	æ:	r es i	

CONTINUED FROM PAGE V-		141844								-		OUTFALL NO. 0			
	2.	MARK '	Χ,				FFLUENT	1			4. UNITS (specify if blank)		CE (options	<i>d</i>)
1 Pollutant and CAS NO. (If available)	a. Testing	b Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA (if available		c LONG TERM AV	- 13	d, No, OF	a. CONCENTRA	b. MASS	a. LONG TERM VALUE		b. NO. OF
·	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	u, 141433	(1) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION - VOLATIL	LE COMPO	UNDS (ca	ntinued)												
22V ₋ Methylene Chloride (75-09-2)	×	x		< 0.0028	< 2.87	(#	:==	-	\$ # \$	1	РРМ	LBS/DAY		447	
23V_1,1,2,2- Tetrachloroethane (79-34-5)	×	×		< 0.0069	< 7,06	n=	1557	7		1	PPM	LBS/DAY	-	. #80	
24V Tetrachloroethylene (127-18-4)	×	х		< 0.0041	< 4.20	25	F	H	<u>**</u>	1	PPM	LB\$/DAY	l.=.	270	
25V Toluene (108-88-3)	×	×		< 0.006	< 6.14	95	- 			1	РРМ	LBS/DAY	-	-	
26V: 1,2-Trans- Dichloroethylene (156-60-5)	x	×		< 0.0016	< 1 64	19	*	#8	5%	1	PPM	ŁBS/DAY	-	570	•••
27V 1,1,1-Trichloroethane (71-55-6)	×	x		< 0.0038	< 3,89	. 	***	4	**	1	РРМ	LBS/DAY	-	æ	
28V. 1,1,2-Trichloroethane (79-00-5)	×	x		< 0.005	< 5.12	o.₩	×	-		ı	РРМ	LBS/DAY	-	-	-
29V Trichloroethylene (79-01-6)	×	×		< 0.0019	< 1.94	: See	100	14	943 V	ī	РРМ	LBS/DAY	-		-
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 2.35	3#	₩	100	. 	ī	PPM	LBS/DAY	-		.
31V, Vinyl Chloride (75-01-4)	x	×		< 0.0018	< 1.84	iā.	33,	75		1	РРМ	LB\$/DAY	₩.	72	ITC.)
GC/MS FRACTION - ACID CO	MPOUND	S													
I A. 2-Chlorophenol (95-57-8)	×	x		< 0.01	< 10.23	2-3-3 - 	-	iii I ii	±±(1	РРМ	LBS/DAY	2	*	a
2A 2,4-Dichlorophenol (120-83-2)	×	х		< 001	< 10 23	745		-42		ı	РРМ	LBS/DAY	-	#	=0
A. 2,4-Dimethylphenol 105-67-9)	х	x		< 0.01	< 10 23	æ		1/77		1	РРМ	LBS/DAY		573	77
A 4,6-Dinitro-OCresol 534-52-1)	х	x		< 0.05	< 51.17	VZ.	***	7.5	æ	1	PPM	LBS/DAY	-	*	-
A 2,4-Dinitrophenol 51-28-5)	x	×		< 0.01	< 10.23			: ::	**	1	РРМ	LBS/DAY		**	
6A. 2-Nitrophenol 88-75-5)	х	x		< 0.01	< 10 23	366	±.	14		1	РРМ	UBS/DAY	-		-
A. 4-Nitrophenol 100-02-7)	×	x		< 0.05	< 51.17	æ				1	РРМ	LBS/DAY		-	F4.)
A. P-Chloro-MCresol 59-50-7)	х	x		< 0.01	< 10.23	134	:#4	(4	**	1	РРМ	LBS/DAY	= :	340	227
A. Pentachlorophenol 87-86-5	х	x		< 0.05	< 51.17	-	(Va)	2#	(page)	1	РРМ	LBS/DAY	## T	100	-
0A. Phenol 108-95-2)	×	x	6974	< 0.0}	< 10.23	72 72	740	, Sad	·	1	PPM	LBS/DAY	=	140	
IA 2,4,6-Trichlorophenol 88-05-2)	×	x		< 0.01	< 10.23	3 5	-	м	ee:	1	РРМ	LBS/DAY	H)		-

CONTINUED FROM PAGE V-5												OUTFALL NO. 0			
	2.	MARK!	X'				EFFLUENT		-11		4. UNITS (sp	ecify if blank)		E (option	al)
1 Pollutant and CAS NO. (If available)	a Testing	b. Believed	c. Believed	a, MAXIMUM DA	Y VALUE	b. MAXIMUM 30 E (if ovailab		c. LONG TERM AV available		4 No. OF	a. CONCENTRATI	b MASS	a. LONG TERM VALUE		b. NO. O
,	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON		(1) CONCENTRATION	(2) MASS	ANALYS
S/MS FRACTION - BASE/NEU	TRAL CON	4POUNDS	S												
B. Acenaphthene (83-32-9)	x	x		< 0.01	< 10.23		421	æ	20	1	PPM	LBS/DAY	-		<u></u>
B. Acenaphtylene (208-96-8)	x	х		< 0.01	< 10.23	#:	140 1	-	440	1	PPM	LBS/DAY	-		
B Anthracene (120-12-7)	×	х		< 0.01	< 10.23	*	=		#0	1	PPM	LBS/DAY	**	**	-
B. Benzidine (92-87-5)	x	x		< 0,063	< 64.47	=		*	(e)	1	РРМ	LB\$/DAY	*	=	
5B, Benzo (a) Anthracene 56-55-3)	x	х		< 0.01	< 10 23	-			_	1.	РРМ	LBS/DAY	(4)		
5B Benzo (a) Pyrene (50-32-8)	x	х		< 0.01	< 10 23	**	**	***	#:	1	РРМ	LBS/DAY	(4)	**	u.
7B, 3,4-Benzofluoranthene (205-99-2)	x	×		< 0.01	< 10.23	221		120	=	1	РРМ	LBS/DAY	-		
8B, Benzo (ghi) Perylene (191-24-2)	x	x		< 0.01	< 10.23	20	22	12		1	PPM	I.BS/DAY	-	4	
9R Renzo (k) Fluoranthene (207- 08-9)	x	x		< 0.01	< 10.23	**		:440	=)	PPM	1.BS/DAY	>=	*	-
10B Bis (2-Chloroethoxy) Methane (111-91-1)	x	×		< 0.01	< 10.23	4	=	-	=	ì	PPM	LBS/DAY	·	(20)	
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	×		< 0.01	< 10.23	#		=	*	1	РРМ	1.BS/DAY	2	a /	-
12B Bis (2-Chloroisopropyl) Ether (102-80-1)	×	×		< 0.01	< 10 23	943) (a-4)	1844	=	1	PPM	LBS/DAY	(-	-
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	×	x		< 0.01	< 10.23	**		(#E	-	1	РРМ	LBS/DAY	. 	#2	-
148 4-BromophenylPhenyl Ether (101-55-3)	x	×		< 0.01	< 10.23	570	172	1775	5 0	1	РРМ	LBS/DAY	3	3 0	=
ISB, Butyl Benzyl Phthalate (85- 58-7)	x	x		< 0.01	< 10.23	*	-			1	РРМ	LBS/DAY	340	#	-
16B ₊ 2-Chloronaphthalene (91-58- 7)	x	x		< 0.01	< 10.23	**	-	œ	-	1	РРМ	LBS/DAY	39.		
17B 4-Chlorophenyl Phenyl Ether (7005-72-3)	×	×		< 0.01	< 10,23	8		## E	72	ī	PPM	LB\$/DAY	*	#	
18B Chryscne (218-01-9)	x	х		< 0.01	< 10.23	*		Said.	-	1	РРМ	LBS/DAY	366	**	
9B Dibenzo (a,h) Anthracene 53-70-3)	x	х		< 0.01	< 10.23			æ	-	Ĭ	PPM	LBS/DAY	S#5	22.	-
OB 1,2-Dichlorabenzene (95-50-	×	x		< 0.005	< 5 12			4	3	1	РРМ	LBS/DAY	ra:	127	-
21B 1,3-Di-chlorobenzene (541- 73-1)	×	×		< 0.005	< 5.12	*		S==	**	Ţ	PPM	LBS/DAY	-	540	-

CONTINUED FROM PAGE V-												OUTFALL NO 0			
	2	. MARK	'X'				FILUENT				4. UNITS (x	pecify if blank)		KE (aption	al)
I_Pollutant and CAS NO. (If available)	a. Testing	b Believed	c. Believed	a, MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D (if availab		c LONG TERM AV (if available		d, No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE		b. NO. OF
,	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	0. MA33	(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NE	UTRAL C	OMPOUN	DS (continu	red)	V								13.31		
22B, 1,4-Dichlorobenzene (106- 46-7)	x	λ		< 0.005	< 5.12		4			1	РРМ	LBS/DAY	<u> </u>	•	
23B, 3,3-Dichlorobenzidine (91- 94-1)	x	x		< 0.02	< 20_47	·	124	:##	4	1	PPM	LBS/DAY		S40	
24B, Diethyl Phthalate (84-66- 2)	x	х		< 0.01	< 10.23		191	: *	+	1	РРМ	LBS/DAY		(ee)	
25B. Dimethyl Phthalate (131 - 11-3)	x	×		< 0.01	< 10.23	G44	:#		-	I.	РРМ	LBS/DAY		- C	-
26B. Di-N-Butyl Phthalate (84- 74-2)	x	x		< 0.01	< 10.23			-	,,	Ē	PPM	LBS/DAY	-	:#E	
27B 2,4-Dinitrotoluene (121- 14-2)	x	×		< 0.01	< 10.23		le-	-	**	T.	PPM	LBS/DAY		⊕	
28B. 2,6-Dinitrotoluene (606- 20-2)	×	×		< 0.01	< 10.23	-	litt	-	-	Ü	РРМ	LBS/DAY		1000	
29B, Di-N-Octyl Phthalate (117- 84-0)	х	x		< 0.01	< 10.23		-		777	1	РРМ	LBS/DAY	#1	*	
30B, 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	x	x		< 0.1	< 102.33	-	=		-	1	РРМ	LBS/DAY	155	546	-
31B Fluoranthene (206-44-0)	x	х		< 0.01	< 10.23		12	-	-	1)	РРМ	LBS/DAY	₩.		•
32B. Fluorene (86-73-7)	×	х		< 0.01	< 10,23				**	j)	РРМ	LBS/DAY			1
33B. Hexachlorobenzene (118- 74-1)	x	×		< 0.01	< 10.23	æ	*	:• :	**	6	PPM	LBS/DAY	*	***	***
34B, Hexachlorobutadiene (87- 68-3)	×	x		< 0.01	< 10 23	N#	2	- M	1	1)	PPM	LBS/DAY	20	622	-
35B. Hexachlorocyclopentadiene (77- 47-4)	×	x		< 0.0}	< 10.23	:	-			1	РРМ	LBS/DAY	-	340	-
36B Hexachloroethane (67-72-	x	x		< 0.01	< 10 23	9 4	24	1540	***	Î	РРМ	LB\$/DAY	**	**	
37B Indeno (1,2,3-cd) Pyrene (193-39-5)	х	x		< 0.01	< 10,23		31	5	B)	1	РРМ	LBS/DAY		36	-
38B, Isophorone (78-59-1)	×	x		< 0.01	< 10,23	34	-	266	**)	ı	РРМ	LBS/DAY	**	135	-
39B Naphthalene (91-20-3)	×	×		< 0.01	< 10.23	5+4	-	-	340	Ĩ	PPM	LBS/DAY	#i	394	-
40B, Nitrobenzene (98-95-3)	x	×		< 0.01	< 10.23		#	*	<u>≅</u> 8	1.	PPM	LBS/DAY	-	123	
41B N-Nitrosodimethylamine (62-75-9)	×	x		< 0.01	< 10.23	946		-		Ē	РРМ	LBS/DAY	-	=	
42B. N-Nitrosodi- N- Propylamine (621-64-7)	×	x		< 0.01	< 10.23		Ħ	*	9	ı	РРМ	LB\$/DAY	=	22	1.7

EPA Form 3510-2C (8-90)

PAGE V-7

CONTINUED FROM PAGE												OUTFALL NO. 0			
	2	MARK	'X'				FLUENT				4. UNITS (s	pecify if blank)		(E (option	al)
1: Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c, Believed	a MAXIMUM D	AY VALUE	b. MAXIMUM 30 D. (if available		c. LONG TERM AV (if availabl		d No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE		b. NO. OF
(ii availabio)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION	b. MA33	(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE	NEUTRA:	L COMPO	UNDS (cor	ntinued)											
43B, N- Nitrosodiphenylamine (86-30-6)	x	х		< 0.01	< 10.23	*	:	-		i	PPM	LBS/DAY	-	**	-
44B. Phenanthrene (85-01-8)	х	x		< 0.01	< 10.23			-	# 1	1	РРМ	LBS/DAY		<u></u>	=
45B, Pyrene (129-00-0	х	x		< 0.01	< 10.23	*	-		121 5	1	РРМ	LBS/DAY	-	#	
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.01	< 10.23	70.	-	NT2	x22	ı	PPM	LBS/DAY			- 4
GS/MS FRACTION - PESTI	CIDES														
IP. Aldrin (309-00-2)	x	x		< 0.00005	< 0.05	#	=		322	1	РРМ	1.BS/DAY	ar	14.61	
2P, α-BHC (319-84-6)	x	x		< 0.00005	< 0.05	*	*		**	1	PPM	1.BS/DAY	-	*	•
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.05	#2	22.5	-	122	1	PPM	LBS/DAY	201	=	-
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.05	**			4	1	РРМ	LBS/DAY	₩.	**	
5₽. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.05	-	·*·		-	I	РРМ	LBS/DAY		**	
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.20	₩.		1 2	:##	ī	РРМ	LBS/DAY	<u> </u>	\$46 \$46	-
7P. 4.4'-DOT (50-29-3)	х	х		< 0.0001	< 0.10		447	14	*	1	PPM	LBS/DAY	# C	342	
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.10	*	**		*	1	РРМ	LBS/DAY		991	
9P. 4,4'-DDD (72-54-8)	x	×		< 0.0001	< 0.10	***	**		1.55	1	РРМ	1.BS/DAY	5 0	ŷs.	
10P. Dieldon (60-57-1)	x	х		< 0.0001	< 0.10		-	65		1	PPM	LBS/DAY		<u> </u>	- (
IIP, α-Endosulfan (115-29-7)	x	х		< 0.0001	< 0.10	**	-		144	1	PPM	LBS/DAY	**:	3 €	-
12P. β-Endosulfan (115-29-7)	x	х		< 0.0001	< 0.10	**		-		1	PPM	LBS/DAY	-		-
13P Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.10	-	=	·	=	1	РРМ	1.BS/DAY	. 5	2	-
14P. Endrin (72-20-8	x	х		< 0.0001	< 0.10		···	-	-	1	PPM	LBS/DAY	-	(4	-
Aldehyde (7421-93-4)	x	х		< 0.0001	< 0.10		-	:25		1	PPM	LBS/DAY	=:	325	-
16P. Heptachlor (76-44-8) EPA Form 3510-2C (8-90)	x	x		< 0.00005	< 0.05	#1	-	=	100	ī	РРМ	LBS/DAY	*		-

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EPA I.D. NUMBER (copy from Item 1 of Fonz 1) 110000340774 OUTFALL NO. 001/002

CONTINUED FROM PAGE V-8

CONTINUED FRO	M PAGE V	V-8													
	2	MARK	'X'			3. E	FFLUENT				4. UNITS (5	pecify if blank)	5. INTAI	KE (option	al)
1. Pollutant and CAS NO. (If available)	a, Testing Required		c. Believed	a, MAXIMUM D	AY VALUE	b MAXIMUM 30 DA' availahle)		c. LONG TERM AVI available		d No OF	a, CONCENTRA	b. MASS	a. LONG TERM A	/G. VALUE	D. NO. OF
pronune)	Kequirod	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION	- PESTIC	IDES (con	tinued)												
17P, Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.10		=	:#C	L 996	1	РРМ	LBS/DAY		## I	
8P, PCB-1242 53469-21-9)	x	х		< 0.001	< 1.02	-	·		5 7	t	РРМ	LBS/DAY	-	55 8	-
19P. PCB-1254 11097-69-1)	х	x		< 0.001	< 1.02	-	14	8		L	РРМ	LBS/DAY	=	33 .0	-
20P. PCB-1221 11104-28-2)	x	х		< 0.001	< 1.02	1,44	=		200	ι	РРМ	LBS/DAY	-	227	
21P, PCB-1232 11131-16-5)	x	х		< 0.001	< 1,02			-	:Eee	1	РРМ	LBS/DAY	-	***	
2P. PCB-1248 12672-29-6)	х	х		< 0.001	< 1.02	ë	-5	-	/ 	1	PPM	LBS/DAY	20	atro	
23P, PCB-1260 11096-82-5)	x	х		< 0.001	< 1.02		1660	-	n <u>=</u>	1	PPM	LBS/DAY	-	-	-
4P. PCB-1016 12674-11-2)	x	х		< 0.001	< 1,02		900	-		Í	PPM	LBS/DAY	-	-	-
25P. Toxaphene (8001-35-2)	×	x		< 0.005	< 5.12		*	-	2 77	1	РРМ	LBS/DAY		#4	-

EPA Form 3510-2C (8-90)

Page V-9

Additional Tes				sample								OUTFALL 1			
	2	MARK'	X			3. EFFL	UENT				. UNITS (spe	cify if blank	5. INT	AKE (optional	}
1. Pollulant and CAS NO. (If	a. Testing	b, Believed	c. Believed	a. MAXIMU	M DAY VALUE	b. MAXIMUM 30 E (if availah		c. LONG TERM A availab		d, No. OF	a CONCENTRA	b. MASS	a. LONG TERM	AVG. VALUE	6. NO, OF
available)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
Uranium		×		0,00035	0.36					1	PPM	LB\$/DAY	S=1	1576	=
2,4-D		×		< 0.01	< 10.23			-		l	PPM	LBS/DAY	-	-	74
TI (dissolved)		х		0.0002	0.20	2		-	-	L	PPM	LBS/DAY	2		-
Ti (dissolved)		×		< 0.002	< 2.05			-	. 	ı	PPM	LBS/DAY	**	3**	**
Sn (dissolved)		ж		< 0.005	< 5.12	-		-	-		PPM	LB\$/DAY	-	-	
Se (dissolved)		к		< 0.003	< 3.07	2.			322		PPM	LB\$/DAY			44
Sb (dissolved)		х		< 0.001	< 1 02	-	-	-	-	1	PPM	LBS/DAY	-	7 99	-
Pb (dissolved)		×		< 0.001	< 1.02	-	44	**	-	1	PPM	LBS/DAY		-	4
Ni (dissolved)		×		< 0.005	< 5.12			-	9		PPM	LBS/DAY			-
Mo (dissolved)		×	A-22-11-11	< 0.001	1.02	**		**	- E		PPM	LBS/DAY		**	
Hg (dissolved)		x		< 0.0002	< 0.20			**	-	T	PPM	LBS/DAY			
Cu (dissolved)		×		800.0	8.19	#				1	PPM	LBS/DAY			
Cr (dissolved)		×		< 0.001	< 1.02	·		*	-	1	PPM	LBS/DAY	-	**	-
Co (dissolved)		x		< 0.0006	< 0.61	-		-	-	1	PPM	LBS/DAY	2	~	_
Cd (dissolved)		x		< 0.0003	< 0.31		771	-	.e.	1	PPM	LBS/DAY		-	
Be (dissolved)		×		< 0.0002	< 0.20		90	-	· ·	1	PPM	LBS/DAY	THE STATE OF	-	-
Ba (dissolved)		×		0.038	38.89	4	_	[B]	122	1	PPM	LBS/DAY	122		
As (dissolved)		x		< 0.003	< 3.07	-			-	1	PPM	LH\$/DAY		-	_
Ag (dissolved)		x		< 0.0001	< 0.10	-		· **	-	1	PPM	LBS/DAY	**	_	-
Zn (dissolved)		х		< 0.01	< 10.23				12	1	PPM	LBS/DAY	32	722	=3
Ma (dissolved)		x		0.04	40.93	-		-	/94	1	PPM	LBS/DAY			
Mg (dissolved)		×	1	7.82	8002.35	1 -	-	3 4	-	- 1	PPM	LBS/DAY	1 124	-	**:
Fe (dissolved)		x		< 0.05	< 51.17			i	-	T	PPM	LBS/DAY	-		**
Al (dissolved)		×		< 0.09	< 92.10	-		***	1044	1	PPM	LBS/DAY	-	-	**
Total Dissolved Solids		х:		305.5	31262365	-	-	*	194	î.	PPM	LBS/DAY	-	· -	-
Total Hardness as CaCO3		x		111,15	113741.80	-			-	i i	PPM	LBS/DAY	() **	:544	er:
Chlorides as CI		×		23.08	23618.18			22	(i=	1	PPM	LBS/DAY	Train .	324	4.5
Nitrate as N		x		1,44	1473.58	272	793	3.55	888	1	PPM	LBS/DAY	188	: EE	**
Hydrogen Sulfide		×		< 0.05	< 51.17	**	-		744	11	PPM	LBS/DAY	-	***	
Chromium +6 as		×		< 0.005	< 5.12	-	=	æ	(E	1	PPM	LBS/DAY	16		
Nonylphenol		x		< 0.01	< 10.23	**		-	(e	1	PPM	LBS/DAY		T	
l'ributyltin			x	144		**			144		PPM	LBS/DAY		(44 (44	**
Kepane				< 0.0001	< 0.10					1	PPM	LBS/DAY		1922	
Methoxychlor		x		< 0.0001	< 0.10		-	**	355	1	PPM	LB\$/DAY		588	
Mirex		×		< 0.0001	< 0.10	-		344		11	PPM	LBS/DAY	12	-	**
Endrin Aldehyde		x		< 0.0001	< 0 10					1.	PPM	LBS/DAY		- A	
Chlomyrifos		×		< 0.0002	< 0.20	-	-		275		PPM	LBS/DAY	-	***	***
Demeton		х		< 0.001	< 1.02				243	115	PPM	LBS/DAY	140	***	**
Diazinon		x		< 0.001	< 1.02	12				1	PPM	LBS/DAY			
Guthion		x		< 0.001	< 1.02			. 	-	1	PPM	LBS/DAY	H-1:	977	
Malathion		×		< 0.001	< 1.02	-	-		-	1	PPM	LBS/DAY	_		**
Parathion		×		< 0.001	< 1.02			**		- 1	PPM	LBS/DAY	-		
Silvex		x		< 0.002	< 205	-	_		-	1	PPM	LBS/DAY			

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OUTFALL NO. 003

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUENT					3. UNITS (spec	cify if blank	4. INTA	KE (optiona	al)
1; Pollutant	a l	MAXIMUM DAY VALU	ie .	b MAXIMUM 30 DAY available)		c, LONG TERM A' (if availal		d. No. OF	2 CONCENTRATI	b. MASS	a. LONG TERM AV		b. NO. OF
		(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON	b. Mario	(1) CONCENTRATION	(2) MASS	ANALYSES
a Biological Oxyge	en Demand (BOD)	< 3.0	< 3562.848	// 		·	<u> </u>	1	РРМ	LBS/DAY	æ	, 55 7	
b Chemical Oxyge	n Demand (COD)	13,31	15807.16896	-	•		===	l	PPM	LBS/DAY	41	=	-
c. Total Organic Ca	arbon (TOC)	5,7	6769,4112		<i>au</i> :		-	4	PPM	LBS/DAY	*	**	
d_Total Suspended	Solids (T.SS)	7,9	9382,1664				*	1	PPM	LBS/DAY	N.T.	-	
e, Ammonia (us N)		0.03	35.62848	199	-	, 	**	1	PPM	LBS/DAY		·	
f. Flow		VALUE 142	4	VALUE 142.4		VALUE 82.55		24	MGD		VALUE 		
g. Temperature (wi	nter)	VALUE 30.	7	VALUE -		VALUE -		1	°C		VALUE 		#
h. Temperature (su	mmer)	VALUE 42.	6	VALUE		VALUE -		1	°C		VALUE -		
i. pH		7.5	8.3	-				24	STANDA	STINU OS			iz:

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1 0 11 1	2.MA	RK 'X'			3. EF	FLUENT				UNITS (spec	ify if blank	5. INTA	KE (optiona	al)
1, Pollutant and CAS NO. (If	b. Believed	c, Believed	a, MAXIMUM I	DAY VALUE	b. MAXIMUM 30 DA available		c. LONG TERM AV	,	d. No. OF	a.	1 14.05	a, LONG TERM AV	G VALUE	b. NO. OF
available)	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATI ON	b MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)	×		0.81	961.96896	-	**	-	*	1	PPM	LBS/DAY		**	2.0
b. Chlorine, Total Residual	х		< 0.1	< 118.7616	< 0.1	< 118.7616	< 0.1	< 68.8467	48	РРМ	LBS/DAY	l i st	**	
c. Color	х		17		-	990 200	-		1	PCU	2 22 6	1944	:## ====;;	-
d. Fecal Coliform		x	No Sample	*	æ		•	57/		-	-	Lett	055	
e Fluoride (16984-48-8)	x		0.106	125.887296	*		-	#6	1	РРМ	LBS/DAY	194		-
(Nitrate - Nitrite	x		1.33	1579.52928	#				1	PPM	LBS/DAY		(A	-

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ITEM V-B CONTINUED		OUTFALL NO.	003
2.MARK 'X'	3. EFFLUENT	UNITS (specify if blank	

	2.MA	RK 'X'			3. EFF	LUENT		UNITS (SPE	ecify if blank	5. INTAKE (optional)				
1, Pollutant and CAS NO. (If available)	a. Believed	b, Believed	a MAXIMUM	DAY VALUE	b. MAXIMUM 30 DA (if available		c. LONG TERM A (if availab		d No. OF ANALYSES	8. CONCENTRA	b. MASS	a. LONG TERM A	VG. VALUE	b. NO. OF
1000	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS			3	(I) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		0.3	356.28		-	_	*	1	PPM	LBS/DAY	•		**
h. Oil & Grease	x		< 5	< 5938,08	***	-	-	-	1	РРМ	LBS/DAY	-	: 	-
i, Phosphorus (as P), Total (7723-14-0)	x		0.09	106.88544	-		*	æ	1	PPM	LBS/DAY		*	
i. Radioactivity							330	=======			3	Seek.		
(1) Alpha		х	< 2.23	-		-	**	-	1	pCi/L	-		155	=:
(2) Beta		х	< 1.83	-	4:	-	-		1	pCi/L	-	48		-
(3) Radium, Total		х	-	-	-	-	+	-	ı	pCi/L	÷ē.	₩)	Ħ	-
(4) Radium 226, Total		, x ,	3 =	*	**:	-	(**)	-	1	pCi/L	-		-	•==
k. Sulfare (as SY) 4) (14808-79-8)	x		26	30878,02		-		- Size	1	РРМ	LBS/DAY	-	-	H .
Sulfide (as S)	x		< 0.05	< 59.38	H.	.=	<i>3</i> 7.	-	L	РРМ	LBS/DAY	-	221	-
m. Sulfite (as SO ₃) (14265-45-3)		x	No Sample	æ	*	-	-	**		**:	1.55	#P3	##O	
n, Surfactants	x		< 0.01	< 11.88	-	=		1348	1	РРМ	LBS/DAY	=	-:	-
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 106.89	#	741	4	-	L	PPM	LBS/DAY	-	-	-
p. Barium Total (7440-39-3)	x		0.043	51.07	=	S#	-	=	1	PPM	LBS/DAY	₹2.	£	••
q. Boron, Total (7440- 42-8)	х		< 0.02	< 23.75	*		**	i m	1	РРМ	LBS/DAY	*	**	-
r. Cobalt, Total (7440- 48-4)	x		< 0.0006	< 0.71	9		#		(1)	PPM	LBS/DAY	-	-	<u></u>
s. Iron, Total (7439- 89-6)	x		0.36	427.54	*	199	**	·=	1	PPM	LBS/DAY	Ħ.		
t. Magnesium, Total (7439-95-4)	х		8.04	9548,43	-	: **	*	:e s	Ť	PPM	LBS/DAY	1990		-
u. Molybdenum, Total (7439-98-7)	х		< 0.001	< 1.19	-	-	*	-	1	PPM	LBS/DAY	•	-	••
v. Manganese, Total (7439-96-5)	х		0.12	142.51	E	-		*	1	РРМ	LBS/DAY		34 7	-
w. Tin, Total (7440- 81-5)	x		< 0.005	< 5.94	-	-	-	188	E	РРМ	LBS/DAY	-		-
B1-5) x. Titanium, Fotal (7440-32-6)	х		< 0.002	< 2.38	*	-	*	-	1	PPM	LBS/DAY	-		-

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I .		4

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is absent. If you mark column 2 for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for ancrolein, acrylonitrile, 2.4 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

Part C.															
	2	MARK	'X'				FFLUENT			,	4. U	INITS		KE (option	ial)
I, Pollutant and CAS NO. (If available)	a, Testing	b. Believed	c. Believed	a, MAXIMUM DAY VALU		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AN (if availab		d. No. OF	a. CONCENTR	b, MASS	a LONG TERM VALUE		b. NO. OF
tto. (iii dvandbio)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ATION	0. MIA33	(1) CONCENTRATION	(2) MASS	ANALYSE:
METALS, CYANIDE, A	AND TOT.	AL PHEN	OLS												-
1M. Antimony, Total (7440-36-0)	х	х		< 0.001	< 1.19	-	#	:##	-	Ē	PPM	LBS/DAY	:==		<u> </u>
2M. Arsenic, Total (7440-38-2	х	x		< 0.003	< 3.56	±		••	==	1	PPM	LBS/DAY	#	E	-
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.24	墨	*		<u></u>	1	РРМ	LBS/DAY	-	==	-
4M; Cadmium, Total (7440-43-9)	х	х		< 0.0003	< 0.36		24	×		1	PPM	LBS/DAY		22	-
5M, Chromium, Total (7440-47-3)	х	х		< 0.001	< 1.19	481	-		**	1	PPM	LBS/DAY			
6M, Copper, Total (7440-50-8)	х	x		0.01	11.88	×e:	(***)	:**		1	PPM	LBS/DAY		-	- 7
7M. Lead, Total (7439-92-1)	x	х		0.001	1,19	-		E++	**	1	PPM	LBS/DAY	() 	(##	
8M, Mercury, Total (7439-97-6)	x	х		< 0.0002	< 0.24	-	1990	œ.		1	PPM	LBS/DAY	a-m.	-	-
9M. Nickel, Total (7440-02-0)	x	х		< 0.005	< 5.94	##.	: :::: ::	S## 1		1	PPM	LBS/DAY	z ě v	*	-
10M. Selenium, Total (7782-49-2)	x	х		< 0.003	< 3.56	1	(#)		•	1	РРМ	LBS/DAY	-	**	
11M. Silver, Total (7440-22-4	х	х		< 0.0001	< 0.12	25	·	(#)		1	РРМ	LBS/DAY			-
12M, Thallium, Total (7440-28-0)	x	x		< 0.0002	< 0.24	441		1844 /		1	PPM	LBS/DAY	245	922	-
13M. Zinc, Total (7440-66-6)	x	х		< 0.01	< 11,88	3 25	(44)	3943	**	1	PPM	LBS/DAY	-	-	
14M. Cyanide, Total (57-12-5)	x	х		< 0.01	< 11.88	-	:9+6:	(1996)		1	PPM	LBS/DAY		-	
15M. Phenols, Total DIOXIN	х	х		0.01	11.88				-	1	PPM	LBS/DAY		3 5 1.	-

DIOXIN

2,3,7,8Tetrachlorodibenzo-P
Dioxin (1764-01-6)

DESCRIBE RESULTS

No Sample

	2.	MARK	'X'			3. EF	UNITS (sp	AKE (optic	onal)						
Pollutant and CAS NO. (If available)	a	b.	C.	2. MAXIMUM DA	Y VALUE	b. MAXIMUM : VALUE (if ava		c. LONG TERM A' (if availal		d No OF	a. CONCENTRA	b. MASS	a. LONG TEI VALU		b. NO.
avanuare)	Testing Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRAT ION	(2) MASS	ANALY
GC/MS FRACTION - VOL	ATILE C	OMPOU	JNDS												
V. Accrolein 107-02-8)	×	х	3	< 0.01	< 11.88			эн	c n o	1	PPM	LBS/DAY	+:	**	-
V. Acrylonitrile 107-13-1)	×	x		< 0.0015	< 1.78	-	-	-	-	1	PPM	LBS/DAY	- R		
V. Benzene 71-43-2)	х	x		< 0.0044	< 5,23	50	-		=	1	РРМ	LBS/DAY			
V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required					7		
V. Bromoform 75-25-2)	×	x		< 0.0047	< 5.58	-	177		-	1	PPM	LBS/DAY	-	*	-
V. Carbon Tetrachloride 56-23-5)	x	х		< 0.0028	< 3.33	· a.	**	:=	FE:	1	РРМ	LBS/DAY			-
V Chlorobenzene 108-90-7)	x	x	H21000	< 0.006	< 7.13		***	-		3	PPM	LBS/DAY		**	-
V. Chlorodibromomethane 124-48-1)	x	х		< 0.0031	< 3.68	110	ī	14	2 0	1	РРМ	LBS/DAY	**	345	-
V. Chloroethane 75-00-3)	x	x		< 0.0011	< 1.31	*	÷	:-e	=	1	PPM	LBS/DAY	**	*	-
0V. 2-Chloroethylvinyl Ether 110-75-8)	x	х		< 0.0012	< 1.43	3 20	**	144	-	1	РРМ	LBS/DAY			-
IV. Chloroform 67-66-3)	х	x		< 0.0016	< 1.90	*	***	274	*	1	PPM	LBS/DAY	***	#	
2V. Dichlorobromomethane 75-27-4)	x	x		< 0.0022	< 2.61	=		3	*	1	PPM	LBS/DAY	227	**	
3V. Dichlorodifluoromethane 75-71-8)				Not Required		Not Required		Not Required							
4V. 1,1-Dichloroethane 75-34-3)	x	×		< 0.0047	< 5,58		12	-		ı	РРМ	LBS/DAY)#S	-
5V. 1,2-Dichloroethane 07-06-2)	х	x		< 0.0028	< 3.33	**	**	194	-	1	PPM	LBS/DAY	·	**	=
6V. 1,1-Dichloroethylene 75-35-4)	x	x		< 0.0028	< 3.33		25 0	N 77		1	PPM	LBS/DAY	<u> </u>	-	-
7V. 1,2-Dichloropropane ?8-87-5)	x	х		< 0.006	< 7.13	-			44	1	РРМ	LBS/DAY			-
3V. 1,3-Dichloropropylene 42-75-6)	x	x		< 0.0059	< 7.01	**	223	-	a	1	PPM	LBS/DAY	-	-	-
9V. Ethylbenzene 100-41-4)	x	x		< 0.0072	< 8.55	-		-	*	1	РРМ	LBS/DAY	:=:	. FT.	-
0V Methyl Bromide (74-83-9)	х	x		< 0.0014	< 1.66		•			1	PPM	LBS/DAY	-	744	
1 V. Methyl Thloride (74-87-3)	x	x		< 0.0011	< 1.31	-		20		1	PPM	LBS/DAY	346		<u> -</u>

CONTINUED FROM PAGE V-		. MARK "	Y'	3. EFFLUENT 4. UNI									OUTFALL NO. 003 ITS (specify if blank) 5. INTAKE (optional)					
	 	MAKK	<u> </u>			b. MAXIMUM 30 DA		c. LONG TERM AVO	2 MALLIEVIC		4 UNHS (\$	pecify if blank)		")				
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA		6. MAXIMUM 30 DA (if available		c, LONG TERM AVC		d No OF	CONCENTRA	b MASS	a. LÖNG TERM VALUE		b. NO.			
	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(i) CONCENTRATION	(2) MASS	ANALY			
GC/MS FRACTION - VOLATII	LE COMPO	OUNDS (co.	ntinued)									- 500	N TO THE SALE					
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 3.33	(34)	::	-	: Rees	ı	PPM	LBS/DAY	·	1344				
23 V 1,1,2,2- Fetrachloroethane (79-34-5)	х	×		< 0.0069	< 8.19		-	*	·*	ı,	РРМ	LB\$/DAY			-			
24V. Tetrachloroethylene (127-18-4)	x	x		< 0 0041	< 4.87	-	-	-	712	10	PPM	LB\$/DAY	7 22	725	-			
25V Toluene (108-88-3)	x	x		< 0.006	< 7.13				V-55	1	PPM	LBS/DAY	(-	38	-			
26V. 1,2-Trans- Dichloroethylene (156-60-5)	x	x		< 0.0016	< 1.90	7 4 4		-		10	PPM	LBS/DAY	7	144	-			
27V, 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 4,51		-	:#*:	/15	1	РРМ	LBS/DAY	.m	Œ	=			
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0,005	< 5.94	=	**	-		1	РРМ	LBS/DAY	: =	255				
29V Trichlomethylene (79-01-6)	x	x		< 0.0019	< 2.26	(**	*	*	×	1	PPM	LBS/DAY	1.00	-	-			
30V. Trichlorofluoromethane (75-69-4)	×	×		< 0.0023	< 2,73	120	742	===	-	1	PPM	LBS/DAY	=	144				
IV Vinyl Chloride (75-01-4)	x	×		< 0.0018	< 2.14	-	1441	22	2	1	PPM	LBS/DAY	122					
GC/MS FRACTION - ACID CO	MPOUND	S								•					-			
A. 2-Chlorophenal (95-57-8)	×	x		< 0.01	< \$1.88		:		44	1	PPM	LBS/DAY	-	100				
2A, 2,4-Dichlorophenol (120-83-2)	x	x		< 0.01	< 11 88	(4)	34 :	* .	3	ì	PPM	LBS/DAY	De .					
3A. 2,4-Dim ethy)phenol [105-67-9]	x	×		< 0.01	< 11.88	-	-	154	-	1	РРМ	LBS/DAY			-			
4A. 4,6-Dinitro-OCresol (\$34-52-1)	x	×		< 0.05	< 59,38	44	=	æ	5	1	PPM	LBS/DAY		2	**			
5A. 2,4-Dinitrophenol (51-28-5)	x	×		< 0.01	< 11.88	je.		*	<u>~</u>	1	РРМ	LBS/DAY	-	22				
5A 2-Nitrophenol (88-75-5)	х	×		< 0.01	< 11,88	æ		ā.	#	1	PPM	LBS/DAY	10	22				
7A 4-Nitrophenol (100-02-7)	x	х		< 0.05	< 59.38		æ	81		1	PPM	LBS/DAY	₩.	₩.	-			
BA P-Chloro-MCresol (59-50-7)	х	×		< 0.01	< 11.88	**		-	#1	1	РРМ	LBS/DAY	50 0	70	æ			
9A Pentachlorophenol 97-86-5	x	x		< 0.05	< 59.38	••	=	.e.		1	РРМ	LBS/DAY	779	5%	Æ			
10A. Phenol (108-95-2)	x	x		< 0.01	< 11.88	-	••	~		1	PPM	LBS/DAY	#5	=				
1A. 2,4,6-Trichlorophenol 88-05-2)	x	×		< 0.01	< 11.88	122	120		-	1	PPM	LBS/DAY	44 0	¥8:	44			

CONTINUED FROM PAGE V-3	2.	MARK '	X'			3	EFFLUENT				4. UNITS (sp	OUTFALL NO. 0 ecify if blank)	5. INTAI	zl)	
1 Pollutant and CAS NO. (If svailable)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 1 (if availate		c. LONG TERM AV		d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM VALUE	AAVG.	b. NO. O.
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(l) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ON	5. 22.55	(1) CONCENTRATION	(2) MASS	ANALYSI
S/MS FRACTION - BASE/NEU	TRAL COM	(POUND	S												
B. Acenaphthene (83-32-9)	x	x		< 0.01	< 11.88	₩.		: •••	-	1	РРМ	LBS/DAY		5 10.	-
B Acenaphtylene (208-96-8)	х	x		< 0.01	< 11.88	¥	74.	12.6	-	1	PPM	LBS/DAY	æ	2	4
B. Anthracene (120-12-7)	x	x		< 0.01	< 11.88	*	÷e:	·	#	Í	PPM	LBS/DAY	-	-	-
B. Benzidine (92-87-5)	x	x		< 0.01	< 11.88	100	**	(45)		ì	PPM	LBS/DAY		me ?	
B. Benzo (a) Anthracene 56-55-3)	x	x		< 0.01	< 11.88	8	¥.	**	30	ī	PPM	LBS/DAY	*	ž	4
SB Benzo (a) Pyrene (50-32-8)	x	х		< 0.01	< 11.88	**	-	744	**3	1	PPM	LBS/DAY	794	14 0	eq.
7B 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.01	< 11.88		:ex:	390	**	1	РРМ	LBS/DAY	**	#1	77
BB. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.01	< 11 88		#	275		ī	PPM	LBS/DAY		7 0.	=
PB. Benzo (k) Fluoranthene (207- 08-9)	x	x		< 0.01	< 11.88	-		·	4.	ï	PPM	LBS/DAY	- F	=3:	
OB. Bis (2-Chloroethoxy) Methane (111-91-1)	х	x		< 0.01	< 11,88			••	**	ı	РРМ	LBS/DAY	-	9	27
1B. Bis (2-Chloroethyl) Ether 111-44-4)	x	х		< 0.01	83,11 >			-		1	PPM	LBS/DAY	## C		
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	×		< 0.01	< 11.88	=		122	40	1	PPM	LBS/DAY	:44	#	-
3B. Bis (2-Ethylhexyl) Phthalate 117-81-7)	x	x		< 0.01	< 11.88		54E			ĭ	PPM	LBS/DAY		-	
4B, 4-BromophenylPhenyl Ether 101-55-3)	x	×		< 0.01	< 11.88			270	m.	1	PPM	LBS/DAY		=	-
SB, Butyl Benzyl Phthalate (85- 8-7)	x	x		< 0.01	< 11.86					3	PPM	LBS/DAY	(A)	£	
6B 2-Chloronaphthalene (91-58-7)	×	x		< 0.01	< 11.88	**	1944 (*)#4:		ī	PPM	LBS/DAY	3##	540	-
7B. 4-Chlorophenyl Phenyl Ether 7005-72-3)	×	x		< 0.01	< 11.88		1575			ī	PPM	LBS/DAY	V e		-
8B Chrysene (218-01-9)	×	×		< 0.01	< 11.88	-	-	144	44	1	РРМ	LBS/DAY	1.00		
9B, Dibenzo (a,h) Anthracene 53-70-3)	х	x		< 0.01	< 11.88	i a i	I ** I	(**)	***	ı	PPM	LBS/DAY	394	(**)	-
20B. 1,2-Dichlorobenzene (95-50-	x	x		< 0,005	< 5.94	1	A	-	5 .	1	РРМ	LBS/DAY	-		-
(S41-13-Di-chlorobenzene (S41-13-1)	×	×		< 0.005	< 5.94	æ	:**:		-	· t	PPM	LBS/DAY		1443	

CONTINUED FROM PAGE V-												OUTFALL NO.			
	2	MARK	X'				FFLUENT				4. UNITS (pecify if blank)		KE (option	al)
1 Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	MAXIMUM DA		b. MAXIMUM 30 D (if availab	le)	(if availabl	(e)	d No OF	CONCENTRA	b. MASS	a. LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(i) CONCENTRATION	(2) MASS	ANALYSES	TION	0.112133	(I) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE/NE	UTRAL C	OMPOUN	OS (continu	red)										[]	
22B, 1,4-Dichlorobenzene (106- 46-7)	x	x	=1	< 0.005	< 5.94	=2		-	3***	1	PPM	LBS/DAY		=	
23B, 3,3-Dichlarobenzidine (91+ 94-1)	х	x		< 0.02	< 23.75		•	3		1	PPM	LBS/DAY	-	-	
24B Diethyl Phthalate (84-66- 2)	х	x		< 0.01	< 11.88	*	~	#8	144	1	PPM	LBS/DAY	120		-
25B, Dimethyl Phthalate (131 - 11-3)	х	x		< 0.01	< 11.88	<u> </u>	<u>.</u>	₩.		1	РРМ	LBS/DAY	-		
26B. Di-N-Buryl Phthalate (84- 74-2)	х	х		< 0.01	< 11.88	*		2 0	# ·	1	РРМ	LBS/DAY	~	iii	
27B. 2,4-Dmitrotoluene (121- 14-2)	x	х		< 0.01	< 11.88	1		440	(a)	1	РРМ	LBS/DAY	**		-
28B, 2,6-Dinitrotoluene (606- 20-2)	x	×		< 0.01	< 11.88	#3	•	** (140	1	PPM	LBS/DAY	-	-	-
29B, Di-N-Octyl Phthalate (117- 84-0)	х	x		< 0.01	< 11.88	-	e#85			1	PPM	LBS/DAY	·*	-	-
30B, 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	х	к		< 0.1	< 118.76	8	₩	*		i	PPM	LBS/DAY		-	
318. Fluoranthene (206-44-0)	х	×		< 0.01	< 11.88	-				1	PPM	LBS/DAY	. **	-	-
32B Fluorene (86-73-7)	x	х		< 0.01	< 11.88	-	(1000)	#£	340	1	РРМ	LBS/DAY	-	÷	-
33B. Hexachlorobenzene (118- 74-1)	х	x		< 0.01	< 11.88	4 0	:		*	1	РРМ	LBS/DAY	24	#3	-
34B Hexachlorobutadiene (87- 68-3)	x	×		< 0.01	< 11.88	B (27%		:#:	i	PPM	LBS/DAY	-	*	-
35B Hexachlorocyclopentadiene (77- 47-4)	×	х		< 0.01	< 11.88	*	100			1	PPM	LBS/DAY	-	40	_
36B Hexachloroethane (67-72-	х	x		< 0.01	< 11.88	-	·	-		1	РРМ	LBS/DAY	·	440	
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	x	×		< 001	< 11.88	==		-	388	1	PPM	LBS/DAY	222	. 50	
38B. Isophorone (78-59-1)	x	×		< 0.01	< 11.88	#C		-	346	1	PPM	LBS/DAY	·	-	-
39B, Naphthalone (91-20-3)	х	х		< 0.01	< 11.88	-	122	¥	92F	1	РРМ	LBS/DAY	1944 20	#:	-
10B. Nitrobenzene (98-95-3)	×	x		< 0.01	< 11.88	-	378		*	1	PPM	LBS/DAY	i inter	. #30	77
11B. N-Nitrosodimethylamine (62-75-9)	×	x		< 0.01	< 11 88	.	:#:	₩	-	1	PPM	LBS/DAY	-	-	
42B. N-Nitrosodi- N- Propylamine (621-64-7)	×	×		< 0.01	< 11.88	#			:55	1	PPM	LBS/DAY	U.S.	TE)	-

CONTINUED FROM PAGE												OUTFALL NO. 0			
	2	. MARK	'X'				FLUENT				4. UNITS (specify if blank)	5. INTAK		2l)
Pollutant and CAS NO. (If available)	a. Testing Required	b. Believed	c. Believed Absent	a. MAXIMUM DA		(if available	e)	c. LONG TERM AV (if available	e)	d No. OF ANALYSES	a. CONCENTRA	b. MASS	a. LONG TERM VALUE		b. NO. OF
		Present		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE	NEUTRA	L COMPO	UNDS (car	tinued)											
43B. N- Nitrosodiphenylamine (86-30-6)	х	x		< 0,01	< 11.88	-	#0	- 1	*	1	РРМ	LBS/DAY	: 	; - •:	
44B, Phenanthrene (85-01-8)	x	х		< 0.01	< 11.88	-	57. 4	-		1	РРМ	LBS/DAY	/ **	**	-
45B. Pyrene (129-00-0	x	x		< 0.01	< 11.88	-	**	*	**	1	PPM	LBS/DAY	; **	*	-
46B:1,2,4-Trichlorobenzene (120-82-1)	x	х		< 0.01	< 11.88	₩,	##. C	-	#1	1	РРМ	LBS/DAY		34	9
GS/MS FRACTION - PESTI	CIDES				1700										
IP. Aldrin (309-00-2)	x	x		< 0.00005	< 0.06	27	727	-		1	PPM	LBS/DAY	842	22	
2P, α-BHC (319-84-6)	×	x		< 0.00005	< 0.06	• /	#/	-		1	РРМ	LBS/DAY	-	**	••
3P. β-BHC (319-85-7)	х	×		< 0.00005	< 0.06	#I.	** X		-	1	РРМ	LBS/DAY	S.	==	-
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.06	#1			-	1	РРМ	LBS/DAY	-	••	-
5P. 8-BHC (319-86-8)	x	x		< 0.00005	< 0.06	-	-	-	**	1	РРМ	LBS/DAY	(mi	(44)	
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.24	w:		~	*	1	РРМ	LBS/DAY	-	***	
7P. 4,4'-DDT (50-29-3)	x	×		< 0.0001	< 0.12	-	***		-	1	PPM	LBS/DAY	-	***	
8P. 4,4'-DDE (72-55-9)	х	x		< 0.0001	< 0.12		*	-	*	1	PPM	LBS/DAY	-) **	
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.12	#8		-		1	PPM	LBS/DAY	=	·•	
10P. Dieldrin (60-57-1)	х	х		< 0.0001	< 0.12	#.	-			1	PPM	LBS/DAY	-		- (
11P. α-Endosulfan (115-29-7)	X	x		< 0.0001	< 0.12	480		-	**	1	PPM	LBS/DAY	-	**	-
12P. β-Endosulfan (115-29-7) 13P. Endosulfan	x	×		< 0.0001	< 0.12	*	**	-	~	1	PPM	LBS/DAY			=
Sulfate (1031-07-8)	x	x		< 0.0001	< 0.12	**	3	曼	*	1	РРМ	LBS/DAY	-	**	+
14P. Endrin (72-20-8	х	х		< 0.0001	< 0.12		**8	-	-	ı	PPM	LBS/DAY	-	-	-
Aldehy de (7421-93-4)	×	x		< 0.0001	< 0.12		**			ι	PPM	LBS/DAY	## .	-22	-
16P. Heptachlor (76-44-8)	x	х		< 0.00005	< 0.06	-			-	1	PPM	LBS/DAY	F		

OUTFALL NO. 003

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

CONTINUED FROM PAGE V-8

CONTINUED PRO	MITAUE	7.0											I		
	2	, MARK	'X'		-	3. E	FFLUENT				4. UNITS (s	pecify if blank)	5. INTAL	KE (option	al)
1. Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed	a, MAXIMUM DA	AY VALUE	b. MAXIMUM 30 DAY available)		c. LONG TERM AV available		d No. OF	a CONCENTRA	b. MASS	a LONG TERM AV	rg. Valui	b. NO. OF
available)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION	- PESTIC	IDES (con	timued)												
17P. Heptachlor Epoxide (1024-57-3)	x	×		< 0,0001	< 0.12	-	→);	**:	-	1	PPM	LBS/DAY	·-	-	-
18P. PCB-1242 (53469-21-9)	х	х		< 0.001	< 1.19	:00	 .	***	-	1	РРМ	LBS/DAY			-
19P. PCB-1254 (11097-69-1)	х	х		< 0.001	< 1.19		-	##6		1	РРМ	LBS/DAY		3#	-
20P. PCB-1221 (11104-28-2)	х	х		< 0.001	< 1.19	-	-	w)	-	1	РРМ	LB\$/DAY	-	**	-
21P. PCB-1232 (11131-16-5)	x	x		< 0.001	< 1.19	-	-	-		ī	PPM	LBS/DAY	-	8. €	-
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 1.19	-	-			1	PPM	LBS/DAY	.=		
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 1.19		20	-	-	I	РРМ	LBS/DAY		1786	
24P. PCB-1016 (12674-11-2)	х	x		< 0.001	< 1.19	-	#8	**:		1	РРМ	LBS/DAY		:(**	
25P. Toxaphene (8001-35-2)	х	х		< 0.005	< 5.94			-	:=:	1	РРМ	LBS/DAY	022	3 .8	5 0

EPA Form 3510-2C (8-90)

Additional Tes		. MARK "			Pic		3 EFFI	LIENT	•			UNITS (spe	OUTFALL N		TAKE (optional	//
2 0 11		. MAIGC	_	_			1100		1 ONG TERM	(O 1) () () ()		, UNITS (spe	cijy ij blank	3, IN	AKE (OPITORUI	7
1, Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed		a MAXIMUI	M DAY VALUE	b. MAXIMUM 30 L (if availab		c. LONG TERM A' availab		d No. OF	a. CONCENTRA	b. MASS	a. LONG TERM	AVG. VALUE	b. NO. OF
available)	Required	Present	Absent	CONC	(I) CENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ПОМ		(1) CONCENTRATION	(2) MASS	ANALYSE
Jranium		×		<	0.00021	< 0.25	-		-	4	I	PPM	LBS/DAY		() <u></u>	
2,4-D		x		<	0.01	< 11.88		77			ı	PPM	LBS/DAY	.=	-	5
[] (dissolved)		×			0.0002	0.24	#			-	1	PPM	LBS/DAY		-	
Fi (dissolved)		x		<	0.002	< 2.38		12			1	PPM	LBS/DAY			-
Sn (dissolved)		x		<	0.005	< 5.94		-		S22	1	PPM	LBS/DAY	377	-	
Se (dissolved)		x	1	<	0.003	< 3.56	-			**	1	PPM	LBS/DAY	+	-	+
Sb (dissolved)		x		< .	0.001	< 1,19				52	1	PPM	LBSADAY	22		2
b (dissolved)		×		<	100.0	< 1.19			(44)	1995	1	PPM	LBS/DAY	1991		-
Ni (dissolved)		x		<	0.005	< 5.94	H		-	-	1	PPM	LBS/DAY	-		
Mo (dissolved)		×		<	0.001	< 1.19	1 1 2 1	- 7		-	1	PPM	LBS/DAY	-	-	
lg (dissolved)		х		<	0.0002	< 0.24				**	7	PPM	LBS/DAY	546	-	**
Cu (dissolved)		x			0.005	5.94	-		1		1	PPM	LBS/DAY	-	-	-
Cr (dissolved)		×		<	0.001	< 1.19			-		1	PPM	LBS/DAY		-	
Co (dissolved)		x		<	0.0006	< 0.71	-				1	PPM	LBS/DAY	-	_	_
Cd (dissolved)		×		<	0.0003	< 0.36		-		72 0	1	PPM	LBS/DAY			
Be (dissolved)		X		<	0.0002	< 0.24	-	-	-		1	PPM	LBS/DAY		-	_
a (dissolved)		x			0.038	45 13			-		1	PPM	LBS/DAY	-	-	22
As (dissolved)		× .		<	0.003	< 3,56		2	-	-	1	PPM	LBS/DAY	=	-	
Ag (dissolved)		× ×		<	0.0001	< 0.12	-	_	-	-	1	PPM	1,BS/DAY			
In (dissolved)		x	/	<	0.01	< 11.88			**	24	1	PPM	LBS/DAY	34%		220
In (dissolved)		x			0.06	71,26					1	PPM	LBS/DAY		-	
Mg (dissolved)		×			7.36	8740.85	-	-	-			PPM	LBS/DAY			
c (dissolved)		×		<	0.05	< 59.38	**		-	12	1	PPM	LBS/DAY	34	324	220
Al (dissolved)		, A		<	0.09	< 106.89			-	-	- i	PPM	LBS/DAY		_	20
Total Dissolved		x			222,8	264600.84		-	_	1.55	1	PPM	LBS/DAY	97	77.77 37.	
Total Hardness as CaCO3		×			102.6	121849.40		***	S##	257	1	РРМ	LBS/DAY			++ ₀ is
Chlorides as Cl		x			23.2	27552.69	-	÷:	-	584	1	PPM	LBS/DAY		7	
Vitrate as N		×		-	1.34	1591.41	2	10		100		PPM	LBS/DAY		022	440
lydrogen Sulfide		×		<	0.05	< 59.38			-		-	PPM	LBS/DAY			
Chromium +6 as				<	0.005	5.94	**	40			ı	PPM	LBS/DAY	3.		-
lonylphenol		v		<	0.003	< 11.88			-			PPM	LBS/DAY		14	
ributylun		×	x	-			-					PPM	LBS/DAY	**		-
Cepone		×	X	<	0.0001	< 0.12	15					PPM	LBS/DAY		-	220
/ethoxychlor		x		<		< 0.12	1		1		1		LBS/DAY			-
Airex		x		<		< 0.12		-:-	-			PPM PPM	LBS/DAY	-		
indrin Aldehyde				~	1000.0	< 0.12	-		1-1			PPM	LBS/DAY			-
hlorpyrifos	-	X X		<	0.0001	< 0.12	1				(1)	PPM	LBS/DAY	-		
emeton				<	0.0002	< 1.19						PPM	LBS/DAY		_	
hazinon		JN.		<			4			-				200	**	-
	-	×		<	0.001	< 1.19	1		**	-	1	PPM	LBS/DAY	344		
inthion		×			0.001	< 1.19	<u> </u>			L-Tu-	1	PPM	LBS/DAY			-
falathion		X		<	0.001	< 1.19	-		-	-	1	PPM	LBS/DAY		-	-
arathion		x		<	0.001	< 1,19				-	1	PPM	LBS/DAY		447	+++

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO. 004

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUENT		00.90		4 =====================================	3. UNITS (spec	ify if blank)	4. INTA	KE (options	d)
1, Pollutant	a. N	MAXIMUM DAY VALU	E	b. MAXIMUM 30 DAY available		c LONG TERM AN		d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM AV	G. VALUE	b, NO, OF
		(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON	D. 142135	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Biological Oxygo	en Demand (BOD)	< 3.0	< 117.34	-	**			1	РРМ	LBS/DAY	· ·		
b. Chemical Oxyge	n Demand (COD)	10,39	406.40	-	(44)	**	**	1	PPM	LBS/DAY	-	*	-
c. Total Organic Ca	irbon (TOC)	5.7	222.95			5501	-	1	РРМ	LBS/DAY		(#)	
d. Total Suspended	Solids (TSS)	23.5	919.19	19.8	715.02	4.3	72,44	172	РРМ	LBS/DAY	æ	-	
e Ammonia (us N)		0.18	7.04	0.18	6.50	0,06	1.01	11	РРМ	LBS/DAY	-	æ	-:
ſ. Flow		VALUE 4.7		VALUE 4.33		VALUE 2.02		172	MGD	144	VALUE 	in the second	-
g. Temperature (wii	nter)	VALUE 13.1	7	VALUE		VALUE		1	°C		VALUE -		-
h. Temperature (sur	mmer)	VALUE 34,6	5	VALUE		VALUE	4.1.3	1	°C		VALUE 		
i pH		7.38	8.96	8	=	大学教 生		172	STANDA	RD UNITS	建油度 。	数では	

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. EF	FLUENT	- MEANAS - 2			UNITS (spec	ify if blank	5. INTA	KE (optiona	d)
1. Pollutant and CAS NO. (If	b. Believed	c. Believed	a MAXIMUM I	DAY VALUE	b MAXIMUM 30 DA		c. LONG TERM AV		đ. No. OF	a.		a. LONG TERM AV	/G. VALUE	b. NO. OF
available)	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2)	(I) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATI ON	b. MASS	(I) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)	x		5.1	199.48	÷	4	#6		1	PPM	LBS/DAY	1955	:: <u>44</u>	-
b. Chlorine, Total Residual	х		< 0.1	< 3.91	< 0.1	< 3.61	< 0.1	< 1.68	140	PPM	LBS/DAY	ee.		-
c. Color	x		13	744	a .	-	= 0	34F	l.	PCU	:##	(Sag	324	=
d. Fecal Coliform		x	No Sample	*	**	*	=:	₹T:	=		**	-	125	-
e Fluoride (16984-48-8)	x		0.171	6.69		***	≅ 3	<u></u>	1	РРМ	LBS/DAY	æ:	5 4	
f. Nitrate - Nitrite (us N)	x		2.25	88.01	2.25	81.25	1.02	17.18	11	РРМ	LBS/DAY	#/.		Ŀ

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TEM V-B CONTINUE	D										OUTFALL NO.		Arr	
	2.MA	RK 'X'			3. EI	FFLUENT				UNITS (SPE	cify if blank	5. INT	AKE (option	al)
Pollutant and CAS NO. (If available)	a, Believed	b Believed	a MAXIMUM	DAY VALUE	b. MAXIMUM 30 l (if availal		c. LONG TERM A (if availal		d, No, OF ANALYSES	S. CONCENTRA	b, MASS	a LONG TERM A	VG. VALUE	b. NO. OF
	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATIO	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALYSE
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	х		0.18	7.04	0.18	6.50	0.064	1.08	11	PPM	LBS/DAY	**	*	
n. Oil & Grease	х		< 5	< 195.57	< 5	< 180.56	< 5	< 84.23	72	PPM	LBS/DAY	**	•	-
. Phosphorus (as P), Fotal (7723-14-0)	х		0.17	6.65	0.17	6,14	0.06	1.01	11	PPM	LBS/DAY		(m)	-
. Radioactivity														
(1) Alpha		×	< 0.734	<u> </u>	ω.	: E	_	-	1	pCi/L	2 0	(m)	**	-
(2) Beta		х	< 2.9	*	-		-	***	1	pCi/L			=	-
ium, Total		x				-	1-1	÷ 3	1	pCi/L	346		*	-
(4) Radium 226, Total		х	240	44	147	344		-	1	pCi/L	_		*	
k, Sulfate (as SO ₄) (14808-79-8)	х		44.22	1729.65	-	**	u u (-	1	PPM	LBS/DAY	-		-
l. Sulfid e (as S)	×		< 0.05	< 1.96	-	: **	3 44 3		î	PPM	LBS/DAY	-	**	
m. Sulfite (as SO ₃) (14265-45-3)		x	No Sample		-	2 44	I#R	=	-	-		-		122
n. Surfactants	x		< 0.01	< 0.39	-	-	-	1	1	РРМ	LBS/DAY	-	-	-
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 3.52	-	-	## /	*	l	РРМ	LBS/DAY	-	***	-
p. Barium Total (7440-39-3)	x		0.044	1.72	#6	::=	2 0	*	1	РРМ	LBS/DAY	-	**	-
q. Boron, Total (7440- 42-8)	x		0.03	1.17	8	9	#/	*	1	РРМ	LBS/DAY	-		
Cobalt, Total (7440-	x		< 0,0006	< 0.02			-	**	1	РРМ	LBS/DAY	-	-	-
s. Iron, Total (7439- 89-6)	х		7.00	273.80		Take	#0.	**	1	PPM	LBS/DAY	-	-	-
I. Magnesium, Total (7439-95-4)	x		8.36	327.00		// ≟	-		1	РРМ	LBS/DAY	*	2	-
u. Molybdenum, Total (7439-98-7)	x		0.002	0.08	#0	\ €	_		1	PPM	LBS/DAY	=		-
v. Manganese, Total (7439-96-5)	x		0.04	1.56	-	5 ±		(4))	1	РРМ	LBS/DAY	-	.	
w. Tin, Total (7440- 31-5)	x	,	< 0.005	< 0.20	-	-	66.0	-	1	PPM	LBS/DAY	-		-
11-5) L. Titanium, Total (7440-32-6)	х		< 0.002	< 0.08	*	7=	-	-	1	PPM	LBS/DAY	8	-	_

PART C - If you are a primary industry and this putfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is absent. If you mark column 2 for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2 for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2 by you must either subtract either subtractions of your pollutants or which you mark column 2 by you must either subtract either subtractions of your pollutants or which you mark column 2 by your must either subtract either subtractions of your pollutants for which you mark column 2 by you must either subtract either subtractions of your pollutants for which you mark column 2 by your must either subtractions or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

Part C.															
	2	. MARK	'X'				FFLUENT	T I ONTO TERRITORI	10 MALLE		4. U	NITS		KE (option	ial)
I Pollutant and CAS NO. (If available)	a. Testing	b. Believed	C.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 I (if availa		c. LONG TERM AV (if availal		d. No. OF	a.	b. MASS	a LONG TERM VALUE		b. NO. OF
NO. (II available)	Required	Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTR ATION	0, MA33	(1) CONCENTRATION	(2) MASS	ANALYSE
METALS, CYANIDE,	AND TOT	AL PHEN	OLS												
1M. Antimony, Total (7440-36-0)	x	x		< 0.001	< 0.04		-	-	**)	1	PPM	LBS/DAY			-
2M. Arsenic, Total (7440-38-2	х	x		< 0.003	< 0.12			*	*	1	PPM	LBS/DAY		-	
3M. Beryllium, Total (7440-41-7)	x	х		< 0.0002	< 0.01				W45	1	РРМ	LBS/DAY		3	
4M. Cadmium, Total (7440-43-9)	х	х		< 0,0003	< 0.01	1200			220	1	PPM	LBS/DAY	**	i=40	
5M. Chromium, Total (7440-47-3)	х	х		< 0.001	< 0.04	Dear				1	PPM	LBS/DAY	**		
6M. Copper, Total (7440-50-8)	х	х		0.007	0.27	-	**	-		1	PPM	LBS/DAY	·••		-
7M. Lead, Total (7439-92-1)	x	х		< 0.001	< 0.04) 	. 	••	1	PPM	LBS/DAY		•	-
8M. Mercury, Total (7439-97-6)	x	х		< 0.0002	< 0.01		5 <u>55</u>	-55	<i>≅</i>	1	PPM	LBS/DAY			-
9M. Nickel, Total (7440-02-0)	x	х		< 0.005	< 0.20) SE	31		1	РРМ	LBS/DAY	-	*	
10M. Selenium, Total (7782-49-2)	х	х		< 0.003	< 0.12	#	#	## *		I	PPM	LBS/DAY	-	***	-
IIM. Silver, Total (7440-22-4	х	х		< 0.0001	< 0.00	==	-	reti		(1)	РРМ	LBS/DAY	2007		
12M. Thallium, Total (7440-28-0)	х	х		0.0006	0.02		S=11		-	ι	PPM	LBS/DAY	-	-	-
13M Zinc, Total (7440-66-6)	х	х		< 0.01	< 0.39	-		-		I	PPM	LBS/DAY	: 	*-	-
14M Cyanide, Total (57-12-5)	x	x		< 0.01	< 0.39		-	-	-	1	PPM	LBS/DAY		F##	
15M. Phenols, Total	х	х		0.01	0.39	rts.			=	1	РРМ	LBS/DAY		4	-
DIOXIN				7.12.35.30								747			
2,3,7,8- Tetrachlorodibenzo-P			x	DESCRIBE RE	SULTS	No Sample									

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Dioxin (1764-01-6)

	2.	MARK	'X'			3. EI	FLUENT					OUTFALL NO. 0		AKE (optic	onal)
1. Pollutant and CAS NO. (If	a	b.	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM VALUE (if ava	30 DAY	c. LONG TERM A		d. No. OF	я.		a. LONG TEI VALU	RM AVG.	b. NO.
available)	Testing Required	Believed Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALY
GC/MS FRACTION - VOL	ATILE C	OMPO	UNDS												
V. Accrolein 107-02-8)	x	х		< 0.01	< 0.39	#24	77.		520	1	PPM	LBS/DAY	₩ .\	75.	
V. Acrylonitrile 107-13-1)	х	x		< 0.0015	< 0.06	*	=	*	<u> </u>	ì	PPM	LBS/DAY	22).	**	-
V. Benzene 71-43-2)	х	х		< 0.0044	< 0.17		-41		40	1	PPM	LBS/DAY	¥4).	**	
V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required				20.00	2124		
V. Bromoform 75-25-2)	х	x		< 0.0047	< 0.18	-	- <u> </u>	22	#0	I	PPM	LBS/DAY	220	441	•
V. Carbon Fetrachloride 56-23-5)	x	х		< 0.0028	< 0.11	*	4	*	8)	ı	РРМ	LBS/DAY	(* **	-22	
V. Chlorobenzene 108-90-7)	х	х		< 0.006	< 0.23	#.		-	==	1	РРМ	LBS/DAY	5	•	-
V. Chlorodibromomethane 124-48-1)	x	х		< 0.0031	< 0.12	-		-	-	1	РРМ	LB\$/DAY	**	(**)	••
V. Chloroethane 75-00-3)	x	x		< 0.0011	< 0.04	-	*	-	***	1	РРМ	LBS/DAY	F5	=	=
0V_2-Chloroethylvinyl Ether 110-75-8)	x	х		< 0.0012	< 0.05	=	750	25 255	#4	1	РРМ	LBS/DAY		*	ă.
1V. Chloroform 67-66-3)	х	х		0.01682	0.66	-	55 0	25	-	1	PPM	LBS/DAY		*	-
2V. Dichlorobromomethane 75-27-4)	x	х		< 0.0022	< 0.09	-	#8	-	-	1	PPM	LBS/DAY	-	-	-
3V. Dichlorodifluoromethane 75-71-8)				Not Required		Not Required		Not Required							
4V. 1,1-Dichloroethane 75-34-3)	х	х		< 0,0047	< 0.18	-	#	:		1	РРМ	LBS/DAY	**		-
5V. 1,2-Dichloroethane 107-06-2)	x	x		< 0.0028	< 0.11		∓ 6	-		1	РРМ	LBS/DAY	*	***	
6V. 1,1-Dichloroethylene 75-35-4)	x	х		< 0.0028	< 0.11	-	*	ii.	**	1	=PPM	LBS/DAY	12:		-
7V. 1,2-Dichloropropane 78-87-5)	x	х		< 0.006	< 0.23	-	**:	14	æ v	1	РРМ	LBS/DAY	*	-	-
8V. 1,3-Dichloropropylene 542-75-6)	х	x		< 0.0059	< 0.23	-	*	194	*	1	PPM	LBS/DAY	-	*	
9V, Ethylbenzene 100-41-4)	х	х		< 0.0072	< 0.28	-	#5	le le	**	1	РРМ	LBS/DAY	••	æ.	
0V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 0,05	-	#8	144	-	1	PPM	LBS/DAY	34 2	944	
1V. Methyl Chloride (74-87-3)	x	х		< 0.0011	< 0.04		**:	Del	-	1	PPM	LBS/DAY	**	1995	-

CONTINUED FROM PAGE V-										-		OUTFALL NO. 0			raur
	2.	MARK "	X'				FFLUENT				4. UNITS (specify if blunk)	10.5 - 2.5 (0.5 (0.5 (0.5 (0.5 (0.5 (0.5 (0.5 (0	E (optiona	/) T
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM D.4	Y VALUE	b. MAXIMUM 30 DA (if available		c. LONG TERM AVO		d No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE	I AVG.	ь NO OF
,	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
C/MS FRACTION - VOLATIL	E COMPO	UNDS(co.	ntinued)	17 TO TO THE TOTAL					0901/20/20 20						
2V Methylene Chloride (75-09-2)	×	x		< 0.0028	< 0.11		5.575	F50	*	1	РРМ	LBS/DAY	æ	=	=
3V 1,1,2,2- *ctrachlorocthane 79-34-5)	x	×		< 0.0069	< 0.27	×	192	•	*	1	PPM	LBS/DAY		141	
24V Tetrachloroethylene 127-18-4)	х	x		< 0.0041	< 0.16	**	1	**		ä	PPM	LBS/DAY	·	-	-
25V. Tohiene 108-88-3)	ĸ	x		< 0.006	< 0.23				-	ì	PPM	LBS/DAY	*	-	_
26V, 1,2-Trans- Dichloroethylene (156-60-5)	x	x		< 0.0016	< 0.06	¥0	3 4	-	o≆-	1	PPM	LBS/DAY		*	••
27V, 1,1,1-Trichloroethane (71-55-6)	×	x		< 0.0038	< 0.15	a l	M.	120	4	1	РРМ	LBS/DAY	144	:	••
28V. 1,1,2-Trichloroethane (79-00-5)	x	×		< 0.005	< 0 20	, = 0			19	1	РРМ	LBS/DAY	**	<u> </u>	-
29V Trichloroethylene (79-01-6)	х	×		< 0.0019	< 0.07	## A		*		1	РРМ	LBS/DAY	1250 1250 1250 1250 1250 1250 1250 1250	#	
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.09	#		-	(##)	ů.	PPM	LBS/DAY	5 4 4:	-	-
31V. Vinyl Chloride (75-01-4)	x	×		< 0.0018	< 0.07	#7.	*1	**	s ice	1	PPM	LBS/DAY		:=	-
GC/MS FRACTION - ACID CO	MPOUND	S				3.00									
A. 2-Chlorophenol 95-57-8)	×	X :		< 0.005	< 0.20	#G	70	-	3 5 5	38	PPM	LBS/DAY	um.	9.75	÷
2A . 2,4-Dichlorophenol (120-83-2)	x	x		< 0.005	< 0.20		-		Y#5	1	РРМ	LBS/DAY	-	25	7
3A. 2,4-Dimethylphenol (105-67-9)	×	×		< 0.005	< 0.20	24		**		1	PPM	LBS/DAY	-	::::::::::::::::::::::::::::::::::::::	-
4A . 4,6-Dinitro-OCresol (534-52-1)	×	×		< 0.05	< 1.96	100	#9		544	1	PPM	LBS/DAY	5 4 4	1944	-
5A. 2.4-Dinitrophenol (51-28-5)	x	х		< 0.005	< 0.20	\$45	¥(-	-	1	PPM	LBS/DAY	·	44	#
5A . 2-Nitrophenol (88-75-5)	×	×		< 0 005	< 0.20		\$	222	12	1	РРМ	LBS/DAY	944	-	-
7A . 4-Nitrophenal [100-02-7]	x	х		< 0,005	< 0.20	#5	29		. 22	r	PPM	LBS/DAY	**		-
SA P-Chloro-MCresol 59-50-7)	x	x		< 0.005	< 0.20		•		4	1	PPM	LBS/DAY	res	-	-
9A : Pentachlorophenol (87-86-5	x	x		< 0,005	< 0.20	7	*		-	1	PPM	LBS/DAY	· ···	=	
10A - Phenol (108-95-2)	x	x		< 0 005	< 0.20	#	=	*) = "	ı	PPM	LBS/DAY	.22	22	-
IA 2,4,6-Trichlorophenol 88-05-2)	x	×		< 0.005	< 0.20	₩.	÷-:	*	wil .	i	PPM	LBS/DAY			

CONTINUED FROM PAGE V-5	2.	MARK '	x			3	. EFFLUEN	Γ				OUTFALL NO. 0 ecify if blank)		E (option	<i>u</i> ()
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	YVALUE	b. MAXIMUM 30 I (if availab	DAY VALUE			d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM VALUE	AVG.	b. NO. OF
availabley	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MAS	(1) CONCENTRATION	(2) MASS	ANALYSES	ON	U, MIASS	(1) CONCENTRATION	(2) MASS	ANALYSE
S/MS FRACTION - BASE/NEU	TRAL CON	dround	S												
B. Acenaphthene (83-32-9)	×	(x)		< 0.005	< 0.20	: E	144	#0	:**	1	РРМ	LBS/DAY	en 6	200	**
B Acenaphtylene (208-96-8)	x	×		< 0.005	< 0.20	- 125		*	i#	1	PPM	LBS/DAY	#.		-
B. Anthracene (120-12-7)	х	x		< 0.005	< 0.20	TER S	-	4	194	1	PPM	LBS/DAY	<u>as</u>	œ.	
B. Benzidine (92-87-5)	х	х		< 0.005	< 0.20	C#4	-	-	-	1	PPM	LBS/DAY	-	ेश	
5B Benzo (a) Anthracene 56-55-3)	х	×		< 0.005	< 0.20		#	**	275	1	PPM	LBS/DAY	*	-	-
58. Benzo (a) Pyrene 50-32-8)	x	x		< 0.005	< 0.20	- -	2	#	9	1	PPM	LBS/DAY	48	S##	-
7B. 3,4-Benzofluoranthene (205-99-2)	х	×		< 0.005	< 0.20	144	-	#		1	PPM	LBS/DAY	**	æ	•
BB. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.20	-		*		1	PPM	LBS/DAY	7 2		-
9B. Benzo (k) Fluoranthene (207- 08-9)	x	x		< 0.005	< 0.20	155	- -/-		u n	1	РРМ	LBS/DAY	-	14	=
IOB, Bis (2-Chloroethoxy) Wethane (111-91-1)	х	x		< 0.005	< 0,20		25.5		-	1	РРМ	LBS/DAY		ie.	***
11B Bis (2-Chloroethyl) Ether [111-44-4]	х	х		< 0.005	< 0.20				*	1	PPM	LBS/DAY		-	-
12B Bis (2-Chloroisopropyl) Ether (102-80-1)	×	×		< 0.005	< 0.20	55	#3		-	1	РРМ	LBS/DAY	*		-
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	×		< 0.005	< 0.20	22	20	=		1	РРМ	LBS/DAY	541 Y	-	-
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	х		< 0.005	< 0.20	w:	-	-	-	1	PPM	LBS/DAY	·*		-
5B. Butyl Benzyl Phthalate (85- 58-7)	x	х		< 0.005	< 0.20		#3	#*	-	1	PPM	LBS/DAY	Ψ.	#0.	8
16B, 2-Chloronaphthalene (91-58- 7)	×	x		< 0,005	< 0.20	227	-	-	_	1	PPM	LBS/DAY		20	-
17B, 4-Chlorophenyl Phenyl Ether (7005-72-3)	×	x		< 0.005	< 0.20	**	**:	***	-	ı	PPM	LBS/DAY	A	##8	
8B. Chrysene (218-01-9)	х	х		< 0.005	< 0.20	3 0	-	-	8	1	PPM	LBS/DAY			<u> 2</u> /.
9B. Dibenzo (a,h) Anthracene (53-70-3)	x	х		< 0.005	< 0.20		**	·	20	1	РРМ	LBS/DAY	-	46 2	-
20B. 1,2-Dichlorobenzene (95-50-	х	×		< 0.005	< 0.20	ω γ	745		₩.	Ĭ	РРМ	LBS/DAY	-		
21B 1,3-Di-chlorobenzene (541- 73-1)	x	х		< 0.005	< 0.20	€)		, 1	=	1	РРМ	LBS/DAY	-	-	-

CONTINUED FROM PAGE V-												OUTFALL NO. 0			
	2	. MARK	X'				FLUENT				4. UNITS (pecify if blank)		KE (option	al)
I Pollutant and CAS NO (lf available)	a, Testing	b_ Believed	c. Believed	a. MAXIMUM DA		(if available	(e)	c, LONG TERM AV (if available	e)	d, No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NE	UTRAL C	OMPOUNI	DS (continu	ed)								- 400			
22B. 1,4-Dichlorobenzene (106- 46-7)	x	х		< 0.005	< 0.20	¥	140	20:		3	PPM	LBS/DAY		. 	-
23B. 3,3-Dichlorobenzidine (91- 94-1)	х	x		< 0.005	< 0.20	.	**	***) = :	1	PPM	LBS/DAY		-	-
24B. Diethyl Phthalate (84-66- 2)	х	х		< 0.005	< 0.20	*	***			ī	PPM	LBS/DAY	152		-
25B. Dimethyl Phthalate (131 - 11-3)	х	ж		< 0.005	< 0.20	-	1990	440	-	1	РРМ	LBS/DAY			••
26B, Di-N-Butyl Phthalate (84- 74-2)	×	x		< 0.005	< 0.20	-	9 9 %	H.S	: :	1	РРМ	LBS/DAY	**	**	- T
27B, 2,4-Dinitrotoluene (121- 14-2)	×	×		< 0.005	< 0.20	-		**)		1	PPM	LBS/DAY	-		-
28B. 2,6-Dinitrotoluene (606- 20-2)	×	×		< 0.005	< 0.20	*	:22	*	-	1	PPM	LBS/DAY	-	Ħ	
29B. Di-N-Octyl Phthalate (117- 84-0)	×	×		< 0.005	< 0,20	-	•	=		1	PPM	LBS/DAY	=		
30B, 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	x	×		< 0.0001	< 0.00		7 44 7	¥.	2##	1	РРМ	LBS/DAY			-
3 B. Fluoranthene (206-44-0)	х	х		< 0.005	< 0.20	.70	×	*	-	1	PPM	LBS/DAY		-	-
32B. Fluorene (86-73-7)	×	×		< 0.005	< 0.20		155	**	:::	1	PPM	LBS/DAY	3	ě.	
33B. Hexachlorobenzene (118- 74-1)	×	x		< 0.005	< 0.20	⊕ :		*	200	1	РРМ	LBS/DAY			-
34B. Hexachlorobutadiene (87- 68-3)	×	x		< 0.005	< 0.20	1	<u>a</u>	**	**	1	PPM	LBS/DAY	:•• (**):	-
35B Hexachlorocyclopentadiene (77- 47-4)	x	×		< 0 005	< 0.20	340	SHE	-	: -	1	PPM	LBS/DAY	tee.	æn.	-
36B Hexachloroethane (67-72-	×	x		< 0.005	< 0.20	*	:#6		1988	1	PPM	LBS/DAY	S.	##J	=
37B Indeno (1,2,3-cd) Pyrene (193-39-5)	×	x		< 0.005	< 0.20	-	221		//22	1	РРМ	LBS/DAY	8 4 §	140	
38B. Isophorone (78-59-1)	×	×		< 0.005	< 0.20	170	38	·*	325	1	PPM	LBS/DAY	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	200	-
39B: Naphthalene (91-20-3)	х	x		< 0.005	< 0.20	-	%#	*	K##	1	PPM	LBS/DAY	;; et	₩.	-
40B, Nitrobenzene (98-95-3)	×	x		< 0.005	< 0.20	*	:#	*		1	PPM	LBS/DAY	-	20	
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.005	< 0.20		844		ш	1	PPM	LBS/DAY	% 2	-	-
42B. N-Nitrosodi- N- Propylamine (621-64-7)	x	×		< 0.005	< 0.20	#	-	-	**	t	РРМ	LBS/DAY	-	-	

CONTINUED FROM PAGE												OUTFALL NO. 0			
	2	. MARK	'X'				FFLUENT				4. UNITS (s	pecify if blank)		E (option	al)
1. Pollutant and CAS NO.	a. Testing	b.	c. Believed	a, MAXIMUM D	AY VALUE	b. MAXIMUM 30 D. (if available		c. LONG TERM AV		d. No. OF	a.		a. LONG TERM VALUE		b. NO. OF
(If available)	Required	Believed Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b MASS	(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE	NEUTRA	L COMPC	UNDS (co	ntinued)											
4313, N- Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.20	244	2 11		**	1	РРМ	LBS/DAY	-	*	-
44B, Phenanthrene (85-01-8)	x	x		< 0.005	< 0.20	72	42	20	<u> 11</u> 0	1	РРМ	LBS/DAY	· E	=1	
45В. Ругепе (129-00-0	х	х		< 0.005	< 0.20	#	100	20 0	***	1	РРМ	LBS/DAY		753	-
46B. 1,2,4-Trichlorobenzenc (120-82-1)	x	x		< 0.005	< 0.20	íi a	=	3 2	=	ķ.	РРМ	LB\$/DAY		-	
GS/MS FRACTION - PESTI	CIDES		•	•				"					A		
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.0020	7 4	-a :	**		1	РРМ	LBS/DAY	3.94	***	
2P. α-BHC (319-84-6)	x	х		< 0 00005	< 0.0020	(#	-	-	li m a	1	РРМ	LBS/DAY	S25	#	-
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.0020	ų .	#2.0	=	-	1	РРМ	LBS/DAY	· ·	*	-
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.0020	122	24	*	-	l	PPM	LBS/DAY	224	**	-
5P δ-BHC (319-86-8)	x	x		< 0.00005	< 0.0020	-		-	-	1	PPM	LBS/DAY	S 		
6P Chlordane (57-74-9)	x	x		< 0.0002	< 0.0078	2#	30 0	-		î	РРМ	LBS/DAY	:: **	•	
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.0039	Ø#	44):	*	**	1	PPM	LBS/DAY	14	**	 -
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.0039	Les	#8	#C	-	Ī	PPM	LBS/DAY	100		-
9P_4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0,0039	1 PER	T-0	· Æ	=	ı	PPM	LBS/DAY	2 <u>1</u>		-
10P. Dieldrin (60-57-1)	х	x		< 0.0001	< 0,0039	164	= :	=	-	l	PPM	LBS/DAY		1441	-
1 IP. α-Endosulfan (115-29-7)	x	х		< 0.000,0	< 0.0039	1000	••	-	-	1	PPM	LBS/DAY	"	-	-
l 2P β-Endosulfan (115-29-7)	х	х		< 0.0001	< 0.0039	02	===	.es	##.	1	PPM	LBS/DAY		77.	-
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.0039	12	_=		-	1	РРМ	LBS/DAY		**	**
14P. Endrin (72-20-8	х	x		1000,0 >	< 0.0039		**:	••	-	I	PPM	LBS/DAY	₩()	·	**
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0039	757	.		. E	ı	РРМ	L#S/DAY		1	ŧ
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.0020	·-	250	=	-	1	РРМ	LBS/DAY	20	544	-

OUTFALL NO. 004

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

LON HNUED FRO	M PAGE V	-0			1										
	2	MARK	'X'			3.E	FFLUENT				4 UNITS (s	pecify if blank)	5. INTA	KE (option	al)
I. Pollutant and CAS NO. (If	a. Testing	b. Believed	c Believed	a MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DAY available)		c. LONG TERM AVG		d No OF	a. CONCENTRA	b. MASS	a. LONG TERM AV	G. VALUE	D NO OF
available)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
S/MS FRACTION	- PESTIC	IDES (con	inued)												
17P, Heptachlor Epoxide 1024-57-3)	x	×		< 0.0001	< 0.0039	14	-	-	*	ı	РРМ	LBS/DAY	144	-	_
8P, PCB-1242 53469-21-9)	x	×		< 0.001	< 0.04	:¥	**	840	-	1	PPM	LBS/DAY	-	: + +	
9P. PCB-1254 11097-69-1)	x	к		< 0.001	< 0.04	3 **	**:	**		Ĭ	РРМ	LBS/DAY	-	C 45	-
20P. PCB-1221 11104-28-2)	x	×		< 0.001	< 0.04	8 .5				1	РРМ	LBS/DAY	=	0.22	-
21P. PCB-1232 11131-16-5)	x	х		< 0.001	< 0.04	()	#	•		1	PPM	LBS/DAY		14	-
2P. PCB-1248 12672-29-6)	x	×		< 0.001	< 0.04			340		ì	РРМ	LBS/DAY		M	
3P. PCB-1260 11096-82-5)	x	x		< 0.001	< 0.04	799		×	·**	1	РРМ	LBS/DAY	-	122	m.
4P. PCB-1016 12674-11-2)	х	×		< 0.001	< 0.04			*	*	l	РРМ	LB\$/DAY	-	•	
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 0.20	-	*	a.c	-	ı	РРМ	LBS/DAY	-	4 0	##:

EPA Form 3510-2C (8-90)

-VI-14-13-13-13-13-13-13-13-13-13-13-13-13-13-		MARK'	0/06/201 X			3. EFFL	UENT		17		. UNITS (spe	cify if blank	5. IN	TAKE (optional)
Pollutant and CAS NO. (If	a Testing	b. Believed	c. Believed	a. MAXIMU	M DAY VALUE		DAY VALUI	c. LONG TERM A'		d. No. OF	CONCENTRA	b. MASS	a. LONG TERM		b. NO. OF
available)	Required	Present	Absent	(II) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION	0. III.33	(I) CONCENTRATION	(2) MASS	ANALYSE
Jranium		x		< 0.00021	< 0.01	4	- I	-	-	1	PPM	LBS/DAY	-		
2,4-D		x		< 0.01	< 0.39				-	1	PPM	LBS/DAY			-
IT (dissolved)		x		0.0005	0.02	-		-	-	1	PPM	LBS/DAY	**	₩ .	
Ti (dissolved)		x		< 0.002	< 0.08		=			1	PPM	LBS/DAY	==	4	
Sn (dissolved)		×		< 0.005	< 0.20	-	S=	5%	-	1	PPM	LBS/DAY		***	
Se (dissolved)		×		< 0.003	< 0.12	¥	*	-	- 1	1	PPM	LBS/DAY	-	-	
Sb (dissalved)		×		< 0.001	< 0.04	1 4	22	원	¥	1	PPM	LBS/DAY	-		#
Pb (dissolved)		x		< 0.001	< 0.04	1 -	2000	-	-	1	PPM	LBS/DAY		.e.s	-:
Ni (dissolved)	-	×		< 0.005	< 0,20	-	-	_	-	1	PPM	LBS/DAY	-	-	
Mo (dissolved)		x		0.002	0.08			2		1	PPM	LBS/DAY			2
ig (dissolved)		x		< 0.0002	< 0.01	_		-		1	PPM	LBS/DAY	_	940	
Cu (dissolved)		x		0.0002	0.16	-		14	-	i	PPM	LBS/DAY	-	*	
Cr (dissolved)	-	×	_	< 0.001	< 0.04		-			<u> </u>	PPM	LBS/DAY		146	2.0
Co (dissolved)				< 0.0006	< 0.02	-		-		<u> </u>	PPM	LBS/DAY	-	-	
Cd (dissolved)	-	×	_	< 0.0003	< 0.01	2		-		<u> </u>	PPM	LBS/DAY	(a)	2	
Be (dissolved)	-	×		< 0.0003	< 0.01	-	-			1	PPM	LBS/DAY	-	_	
		×		0.0002		1 1	_	155 T	-	<u> </u>	PPM	LBS/DAY	-	-	
Ba (dissolved)	-	x	_		1.29		-e-	-			PPM	1,BS/DAY			-
As (dissolved)		×			< 0.12	20/		-		1					
Ag (dissolved)	_	x		0,000.	< 0.00	75	**	-	-	1	PPM	LBS/DAY	-	-	-
Zn (dissolved)		X		0.013	0.51		-			1	PPM	LBS/DAY			77
Mn (dissolved)	1000	- X		0,02	0.78	-					PPM	LBS/DAY		-	**
Mg (dissolved)		X		8.17	319.57					12	PPM	LBS/DAY		-	**
Fe (dissolved)		×		0.09	3,52				-		PPM	LBS/DAY	-		
Al (dissolved)		х		< 0.09	< 3.52	577			_=		PPM	LBS/DAY	-	1.2	
Fotal Dissolved Solids		x		272.5	10658 73	-		-		l	PPM	LBS/DAY	-	-20	E
Total Hardness as CaCOI		x		104.31	4080.04		i se	-	-	l	PPM	LBS/DAY			
Chlorides as CI		x		55.34	2164.60	+	7,440		-	- 1	PPM	LBS/DAY	-	(**)	
Hydrogen Sulfide		x		< 0.05	< 1.96	-				1	PPM	LBS/DAY	The second	122	
Chromium +6 as		×		< 0.005	< 0.20	H#:	-	-	*	1	PPM	LBS/DAY		189	-
Nonylphenol		x		< 0.005	< 0.20	1 12	-			7	PPM	LBS/DAY			44
Fributyltin			×		-						PPM	LBS/DAY	-	1 2	
Kepone		x	<u> </u>	< 0.0001	< 0.00		-			1	PPM	LB5/DAY			
Methoxychlor		x		< 0.0001	< 0.00	-	-		520		PPM	LBS/DAY	-		
Mirex	-	×		< 0.0001	< 0.00	-				1	PPM	LBS/DAY	-		~
Endrin Aldehyde	1	x		< 0.0001	< 0.00				-	-	PPM	LBS/DAY			_
Chlorpyrifos		×		< 0.0001	< 0.01	3.0			122	i	PPM	LBS/DAY			_
Demeton				< 0.0002	< 0.04	1				1	PPM	LBS/DAY			
	-	X	-	< 0.001	< 0.04	+=-		1	-	1	PPM	LBS/DAY	T		
Diazinon		ĸ		< 0.001	< 0.04		42	-		a .	PPM	LBS/DAY	- 	-	
Guthion		X		< 0.001	< 0.04			-	-	1	PPM	LBS/DAY			
Malathion	-	- N			< 0.04	1:				-	PPM	LBS/DAY		-	
Parathion		X		< 0.001	V.04			-	1.00	1	LIM	LD3/DAY	.75	1.00	4.5

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.

SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 005

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

			-3/10	2. EFFLUENT		200			3. UNITS (spec	cify if blank)	4. INTA	KE (options	ul)
1. Pollutant	a. N	MAXIMUM DAY VALU	E	b. MAXIMUM 30 DAY available		e. LONG TERM A'		d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM AV	G. VALUE	b. NO. OF
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON		(I) CONCENTRATION	(2) MASS	ANALYSES
a. Biological Oxyge	en Demand (BOD)	< 12.6	< 369.90	-	075	æ	#.	ı	PPM	LBS/DAY	22	122	-
b. Chemical Oxyge	n Demand (COD)	16.9	496.13	-	786	S==	#8	1	РРМ	LBS/DAY	-55	**	
c. Total Organic Ca	arbon (TOC)	6.8	199.63		Ţ.	*	B	1	РРМ	LBS/DAY	-		_
d. Total Suspended	Solids (TSS)	13.4	393.38	12	253.20	6.27	51.25	70	PPM	LBS/DAY	E	7 <u>2</u>	-
e. Ammonia (as N)		< 0.05	< 1.47	< 0.05	< 1.06	< 0.05	< 0.41	11	PPM	LBS/DAY	8	-	20
f. Flow	<u> </u>	VALUE 3.5		VALUE 2.53		VALUE 0.98		70	MGD		VALUE 	•	-
g. Temperature (wi	inter)	VALUE 5.9	,	VALUE _		VALUE _		1	°C		VALUE		-
h. Temperature (su	mmer)	VALUE 29.3		VALUE -		VALUE		ı	°C		VALUE		-
і. рН		7.4	8.83	-	2	1 5 150 ° 14.	X 1/2 1/2	70	STANDA	RD UNITS			

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. EF	FLUENT				UNITS (spec	cify if blank	5. INTA	KE (optiona	2l)
1. Pollutant and CAS NO. (If	b.	c, Believed	a. MAXIMUM I	DAY VALUE	b. MAXIMUM 30 DA		c. LONG TERM AV		d. No. OF	a.	b. MASS	■ LONG TERM AV	G. VALUE	b. NO. OF
available)	Believed Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2)	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATI	b. MASS	(I) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)	х		2.1	61.64928	*	20	7924	1 25	i	PPM	LBS/DAY	(100)	#0	
b. Chlorine, Total Residual	x		< 0.1	< 2.93568	< 0.1	< 2.11002	< 0.1	< 0.81732	1	РРМ	LBS/DAY	₹	<u> 1</u> 0	-
c. Color	x		15	=	· ·	32 0	1: 4		ï	PCU	-	#6	**	-
d. Fecal Coliform		x	No Sample	8	2111	24	155.1		æ	=	~=	<u> </u>	201	-
e. Fluoride (16984-48-8)	x		0.142	4.1686656	-	**	(#)	-	1	PPM	LBS/DAY	₩\)	=:	-
Nitrate - Nitrite	х		0.01	0.293568		#1	1.00	8.1732	12	РРМ	LBS/DAY	-	<u> </u>	-

OPA Form 3510-2C (8-90)

TEM V-B CONTINUE	ED .		5%								OUTFALL NO.	005		
	2.MA	RK 'X'			3. EI	FLUENT				.UNITS (SPE	cify if blank	5. INT	AKE (optiona	1)
1. Pollutant and CAS NO. (If available)	a. Believed	b. Believed	a MAXIMUM	DAY VALUE	b. MAXIMUM 30 I (if availal		c. LONG TERM A (if availab		d No. OF ANALYSES	CONCENTRA	b, MASS	a. LONG TERM A	VG. VALUE	b. NO. OF
,	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATIO	(2) MASS	(I) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALYSES
C/MS FRACTION														
, Nitrogen, Total Organic (as N)	x		0,56	16.44	0.56	11,82	0,27	2.21	11	PPM	LBS/DAY	-	S#1	
Oil & Grease	х		< 5	< 146.78	< 5	< 105.50	< 5	< 40.87	70	PPM	LBS/DAY	-	-	- \
Phosphorus (as P), otal (7723-14-0)	x		< 0.05	< 1.47	< 0.05	1.06	< 0.05	< 0.41	11	PPM	LBS/DAY	8 2	·*	
Radioactivity														
1) Alpha		x	< 5	2	-	0.5	-	4	1	pCi/L	_	-	*	-
2) Bela		x	< 1.88	(**			=		1	pCi/L	280	æ	9	*
3) Radium, Total		x		3M		1.0	-	**	1	pCi/L	-		K.**	-
(4) Radium 226, Total		x	025			-	-	-	1	pCi/L	•	X =	÷-	-
c. Sulfate (as SO ₄) (14808-79-8)	х		40.69	1194.53		-	-	-	1	РРМ	LB\$/DAY	rigin .	***	-
Sulfide (æ S)	x		< 0.05	< 1.47	**		-		1	PPM	LBS/DAY	181		-
n. Sulfite (as SO ₃) 14265-45-3)		x	No Sample	·	E-	200		-	-	-	-	180	1946	-
n, Surfactants	х		< 0.01	< 0.29		# .0	-		1	PPM	LBS/DAY	#1	17-202	
7429-90-5)	х		< 0.09	< 2.64			-	i e.	1	PPM	LBS/DAY	##\	-	=0
7440-39-3)	x		0.208	6,11		-	-		1	PPM	LBS/DAY	;; ;	-	-
Boron, Total (7440- 12-8)	х		0.06	1.76	120	75	=		1	РРМ	LBS/DAY	-		
. Cobalt, Total (7440- 8-4)	x		< 0.0006	< 0.02		-	-	a=-	1	РРМ	LBS/DAY	2 0	ta:	
Iron, Total (7439-	x		0.26	7.63	345		-	3#	1	РРМ	LBS/DAY	#5:	-	
. Magnesium, Total (7439-95-4)	×		15.1	443.29		4	-	-	ı	РРМ	LBS/DAY	*	- -1	
. Molybdenum, lotal (7439-98-7)	х		0,006	0.18	ie.	-		Œ	1	РРМ	LBS/DAY	8	a)	-
. Manganese, Total (7439-96-5)	x		0.08	2.35	•	Ψ.	-). **	1	PPM	LBS/DAY		** 8	-
v. Tin, Total (7440- 1-5)	×		< 0.005	< 0.15	-	=	·	12	1	РРМ	LBS/DAY	-	-	-
1-5) Titanium, Total (7440-32-6)	х		< 0.002	< 0.06	-		3	-	1	PPM	LBS/DAY		*	-

EPA I.D. NUMBER (copy from Item 1 o	(Form 1) 110000340774	OUTFALL NO. 005

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you believe is more normal pollutant. If you mark column 2 is for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it while discharged in concentrations of 10 ppb or greater. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

	2	MARK	'X'			3 El	FFLUENT				4. U	NITS	5. INTA	KE (option	al)
I. Pollutant and CAS	a. Testing	ь	C.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 I (if availa		c. LONG TERM AV (if availab		d. No. OF	a.	1 144.00	a. LONG TERI VALUE		b NO OF
NO. (If available)	Required	Believed Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTR ATION	b. MASS	(I) CONCENTRATION	(2) MASS	ANALYSE
METALS, CYANTDE,	AND TOT	AL PHEN	OLS			1-1-1-1-1-1-1-1-1									
IM. Antimony, Total (7440-36-0)	х	х		0.001	0.03				0 .50 0	1	PPM	LBS/DAY	#		
PM. Arsenic, Total 7440-38-2	х	x		0.011	0.32	122	-	=	: :	1	РРМ	LBS/DAY		 1	
6M. Beryllium, Total (7440-41-7)	х	x		< 0.0002	< 0.01	34		-	7 140 0	ì	PPM	LBS/DAY		** 1	-
4M, Cadmium, Total (7440-43-9)	х	х		< 0.0003	< 0.01	·	**	-	()	ä	PPM	LBS/DAY	-	æ	
5M. Chromium, Fotal (7440–47-3)	х	x		< 0.02	< 0.59	-		-		1	PPM	LBS/DAY	-		
6M. Copper, Total (7440-50-8)	x	x		0.001	0.03		2 25	-	170	1	PPM	LB\$/DAY		**	••
7M. Lead, Total (7439-92-1)	x	х		< 0.001	< 0.03		*		1	a	PPM	LBS/DAY			
8M. Mercury, Total (7439-97-6)	х	х		< 0.0002	< 0.01					1	PPM	LBS/DAY			-
9M. Nickel, Total (7440-02-0)	x	х		0.013	0.38	-	2	44	3	1	PPM	LBS/DAY		-	:
10M Selenium, Total (7782-49-2)	х	х		< 0.003	< 0.09	-				1	PPM	LBS/DAY	∃ #H		-
11M. Silver, Total 7440-22-4	х	х		< 0.0001	< 0.00	3 44 0	366 366	-	**	ı	PPM	LBS/DAY	-		-
12M. Thallium, Fotal (7440-28-0)	х	х		0.0005	0.01				:	L	PPM	LBS/DAY	-	=	-
3M. Zinc, Total 7440-66-6)	х	х		0.01	0.29	-	==	-	=	I	РРМ	LBS/DAY	255	-	-
4M. Cyanide, Fotal (57-12-5)	х	х		< 0.01	< 0.29	0.00				1	РРМ	LBS/DAY	1 E	-	
5M. Phenols, Total	х	x		0.03	0.88	8	*		-	1	PPM	LBS/DAY	22	124	-
OIOXIN ,3,7,8-															
2,3,7,8- Fetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RE	SULTS	No Sample	191			1:					

CONTINUED FROM PAGE V-2 *

	2.	MARK	'X'			3. EI	FFLUENT				. UNITS (SE	ecify if blank	5. INT	AKE (opti	onal)
Pollutant and CAS NO. (If available)	a	b.	c.	a. MAXIMUM DA	Y VALUE	b, MAXIMUM VALUË (if ava		c. LONG TERM A (if availa		d No. OF	a. CONCENTRA		a. LONG TE		b. NO.
uvanuore j	Testing Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALY
GC/MS FRACTION - VOL	ATILE C	OMPOU	JNDS												
V. Accrolein 107-02-8)	х	х		< 0.01	< 0.29	(# *)	-	**.	#	1	PPM	LBS/DAY	-	Xee	-
V Acrylonitrile 107-13-1)	х	×		< 0.0015	< 0.04	-		= ∂	æ	1	PPM	LBS/DAY	-	遵	-
V. Benzene 71-43-2)	x	x		< 0.0044	< 0.13		**			1	PPM	LBS/DAY	·=	1996 1996	-
V. Bis (Chloromethyl) ther (542-88-1)				Not Required		Not Required		Not Required							
V. Bromoform 75-25-2}	x	х		< 0.0047	< 0.14		75	-	-	1	PPM	LBS/DAY	#	**	÷
V. Carbon 'etrachloride 56-23-5)	x	x		< 0.0028	< 0.08	: *	=	-	*	1	PPM	LBS/DAY	-	0. 55	.
V. Chlorobenzene 108-90-7)	x	х		< 0.006	< 0.18		-	*		1	РРМ	LBS/DAY	-	S##	
V. Chlorodibromomethane 124-48-1)	×	×		< 0.0031	< 0.09	> 36	-	æ:	-	1	РРМ	LBS/DAY	-	: **	-
V. Chloroethane 75-00-3)	х	х		< 0.0011	< 0.03	.**	-		*	1	РРМ	LBS/DAY			••0
0V. 2-Chloroethylvinyl Cher 110-75-8)	x	x		< 0.0012	< 0.04	-	(#S		-	1	PPM	LBS/DAY		20.	-
1V. Chloroform 67-66-3)	х	x		< 0.016	< 0.47	-	-	#		1	PPM	LBS/DAY	漢	#1	-
2V. Dichlorobromomethane 75-27-4)	х	х		< 0.0022	< 0.06	122	*	27	2	1	РРМ	LBS/DAY	-	26	
3V. Dichlorodifluoromethane 75-71-8)				Not Required		Not Required		Not Required							
4V. 1,1-Dichloroethane 75-34-3)	x	x		< 0.0047	< 0.14	96		**	-	l	PPM	LBS/DAY		****	-
5V 1,2-Dichloroethane 107-06-2)	x	x		< 0.0028	< 0.08	u e	-	*		1	PPM	LBS/DAY	o≅.	(5 6	-
6V, 1,1-Dichloroethylene 75-35-4)	x	х		< 0.0028	< 0.08	-	*	-		1	PPM	LBS/DAY	724	20	-
7V. 1,2-Dichloropropane 78-87-5)	×	х		< 0.006	< 0.18	S -	: -	(**):		1	РРМ	LBS/DAY	-	*	
8V. 1,3-Dichloropropylene 542-75-6)	x	х		< 0.0059	< 0.17	-	-	3E.	-	1	РРМ	LBS/DAY			-
9V. Ethylbenzene 100-41-4)	х	x		< 0.0072	< 0.21	See .	-		3.55 3.55	1	PPM	LBS/DAY	-	-	-
0V. Methyl sromide (74-83-9)	х	х		< 0.0014	< 0.04	74		2.		1	PPM	LBS/DAY			-
IV. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 0.03	5	:##	***	: ₩	1	PPM	LBS/DAY	-	**:	

CONTINUED FROM PAGE V-4												OUTFALL NO. 00		en //	75
	2	MARK '	X'		-		FFLUENT	. 1010 =====	0.3/47170.00	r	4. UNITS (specify if blank)	5, INTAL a. LONG TERM	E (optiona	()
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA (if available		c. LONG TERM AVO available		d. No. OF	a. CONCENTRA	b. MASS	a. LUNG TERN VALUE		b, NO. OF
aranzore ,	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	b. 141A33	(I) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION - VOLATIL	E COMPO	UNDS (co	ntinued)												
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 0.08	=	075	=	æ	ı	PPM	LBS/DAY	**	Æ	
23V. 1,1,2,2- Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 0.20	<u>-</u>	-	***	\@	ı	РРМ	LBS/DAY	:#	i iii	
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 0.12		ж		14	1	РРМ	LBS/DAY	(₩		
25V. Toluene (108-88-3)	x	x		< 0.006	< 0.18	-	24	-	2	1	РРМ	LBS/DAY	æ.	*	
26V. 1,2-Trans- Dichloroethylene (156-60-5)	x	x		< 0.0016	< 0.05		3#	*		1	РРМ	LBS/DAY	-		-
27V. 1,1,1-Trichloroethane (71-55-6)	×	×		< 0.0038	< 0.11		94		3 <u>4</u>	1	PPM	LBS/DAY	-		-
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 0.15	Ē.	H	3	(#	l	РРМ	LBS/DAY	-		••
29 V Trichloroethylene (79-01-6)	x	×		< 0.0019	< 0.06	#	-	**	(E	1	PPM	LBS/DAY	-	ž.	_
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.07	22		=		l	РРМ	LBS/DAY	-	-	
31 V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 0.05	20	£2	等:		1	РРМ	LBS/DAY	i/ee	#	#
GC/MS FRACTION - ACID CO.	MPOUND	S													
I A. 2-Chlorophenol (95-57-8)	x	x		< 0.005	< 0.15			••	1000 1000	1	РРМ	LBS/DAY	U.S.	5 .	ä
2A. 2,4-Dichloraphenol (120-83-2)	x	x		< 0.005	< 0.15	*	-	:••:	æ	1	PPM	LBS/DAY	##	25.\	
3A. 2,4-Dimethylphenol (105-67-9)	x	х		< 0.005	< 0.15	-	-	[+4]	3.00	1	РРМ	LBS/DAY	>##	*	-
4A . 4,6-Dinítro-OCresol (534-52-1)	х	x		< 0.005	< 0.15	*	-	· ·	S ec	1	PPM	LBS/DAY	7 95	#8	-
5A. 2,4-Dinitrophenol (51-28-5)	x	х		< 0.005	< 0.15	44		:#1	294	1	PPM	LBS/DAY	н	#E.	-
6A . 2-Nitrophenol (88-75-5)	x	х		< 0.005	< 0.15	<u>.</u>		144 T	-	1	PPM	LBS/DAY	4	*	•
7A. 4-Nitrophenol (100-02-7)	z	х		< 0.005	< 0,15	••		-	ш	1	РРМ	LBS/DAY	-	-	-:
8A. P-Chloro-MCresol (59-50-7)	x	х		< 0.005	< 0.15	<u>a</u>	22	**	-	1	РРМ	LBS/DAY	-	-	-
9A. Pentachlorophenol 187-86-5	x	x		< 0.005	< 0.15			*	#	1	РРМ	LBS/DAY	-	22	-
55-86-5 A. Phenol 1508-95-2)	x	x		< 0.005	< 0.15	a .	27	i i	-	1	PPM	LBS/DAY	<u> </u>	-	-
IIA. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.005	< 0.15	25:		**		1	PPM	LBS/DAY	4 0	×-	

CONTINUED FROM PAGE V-5												OUTFALL NO. 0			
	2.	MARK	X'			3	. EFFLUE	П	*		4. UNITS (sp	ecify if blank)		KE (options	<i>al</i>)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c, Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 I (if availal		E c. LONG TERM A availab		d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM VALUE	į.	b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) M.4	SS (1) CONCENTRATION	(2) MASS	ANALYSES	ON		(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NEU	TRAL CO	MPOUND	S								E0.W1 10 6	3 -7			
IB. Acenaphthene (83-32-9)	x	х		< 0.005	< 0.15	-		-	*	1	РРМ	LBS/DAY	-	æ•	-
2B. Acenaphtylene (208-96-8)	×	x		< 0.005	< 0.15	-		=	-	t	РРМ	LBS/DAY			8
3B. Anthracene (120-12-7)	x	х		< 0.005	< 0.15	207		-	-	ı	PPM	LBS/DAY		a¥2	
4B. Benzidine (92-87-5)	×	х		< 0.005	< 0.15		-		-	1	PPM	LBS/DAY		:ee	-
5B, Benzo (a) Anthracene (56-55-3)	x	x		< 0.005	< 0.15			-	-	f:	PPM	LBS/DAY	-	373	
6B. Benzo (a) Pyrene (50-32-8)	×	×		< 0.005	< 0.15	.		2		1	PPM	LBS/DAY	-	:4	-
7B. 3,4-Benzoffuoranthene (205-99-2)	×	x		< 0.005	< 0.15		220	-	-	1	PPM	LBS/DAY	**	3#	
BB. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.15	*:	**	-		1	PPM	LBS/DAY	- 	2.55	-
9B. Benzo (k) Fluoranthene (207- 08-9)	x	x		< 0.005	< 0.15	#0		572	5/2	ı	РРМ	LBS/DAY		·#	140
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	×	×		< 0.005	< 0.15			999		1	PPM	LBS/DAY	-		•
11B. Bis (2-Chloroethyl) Ether (111-44-4)	х	x		< 0.005	< 0.15	-	-			1	РРМ	LBS/DAY		-	-
12B Bis (2-Chloroisopropyl) Ether (102-80-1)	x	×		< 0.005	< 0.15	=		(5)	-	1	РРМ	LBS/DAY	æ	-	
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.005	< 0.15		-	=	=	1	РРМ	LBS/DAY	₩		-
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	ж		< 0,005	< 0.15	- :	**	-	*	I	PPM	LBS/DAY	990	Ŧ	**
15B. Butyl Benzyl Phthalate (85- 68-7)	x	x		< 0.005	< 0.15	=	3	-	-	i	PPM	LBS/DAY		2	-
16B, 2-Chloronaphthalene (91-58- 7)	х	×		< 0.005	< 0.15		-	(22)	9 0	1	РРМ	LBS/DAY	022	₩.	-
17B, 4-Chlorophenyl Phenyl Ether (7005-72-3)	×	×		< 0.005	< 0.15		***	:=:	**:	1	РРМ	LBS/DAY	(##)	-	m .
18B. Chrysene (218-01-9)	х	x		< 0.005	< 0.15	=		1551	-	1	PPM	LBS/DAY		Ψ.	22
19B. Dibenzo (a,h) Anthracene (53-70-3)	х	х		< 0.005	< 0,15	=	*	-	-	1	PPM	LBS/DAY	-	-	-
20B. 1,2-Dichlorobenzene (95-50- 1)	×	х		< 0.005	< 0.15	(2)	(p)	·*	-	1	PPM	LBS/DAY	-	#	77
21B. 1,3-Di-chlorobenzene (541- 73-1)	x	x		< 0.005	< 0.15	2 0.	-	-		1	PPM	LBS/DAY	+	=	110

CONTINUED FROM PAGE V-		. MARK	X'			3 F	FFLUENT					OUTFALL NO. 0 pecify if blank)		E (option	2/)
1, Pollutant and CAS NO. (If					373141155	b, MAXIMUM 30 D		c, LONG TERM AV	G. VALUE				a, LONG TERM		ľ
available)	a, Testing	b. Believed	c. Believed	a. MAXIMUM DA	A AVEOR	(if available		(if available		d. No. OF	a. CONCENTRA	b, MASS	VALUE		b, NO. O
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	0, MA55	(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE/NE	UTRALC	OMPOUNI	OS (continu	ed)											
22B, 1,4-Dichlorobenzene (106- 46-7)	x	×		< 0.005	< 0.15	7.	5		.550	1	PPM	LB\$/DAY	-	o ≜	-
23B. 3,3-Dichlorobenzidine (91- 94-1)	x	x		< 0.005	< 0 15		=		440	1	РРМ	LBS/DAY	22.	•	-
24B. Diethyl Phthalate (84-66- 2)	х	x		< 0.005	< 0.15	**	**		**	1	PPM	LBS/DAY	**	-	-
25B. Dimethyl Phthalate (131 - 11-3)	х	x		< 0.005	< 0.15	= 1		<u>2</u> N		1	PPM	LBS/DAY	121	-	
26B. Di-N-Butyl Phthalate (84- 74-2)	х	x		< 0.005	< 0.15	#0.	-	#:	-	1	PPM	LBS/DAY	-	384 384	-
27B, 2,4-Dinitrotoluene (121- 14-2)	x	х		< 0.005	< 0.15	30	-	* 0	••	1	РРМ	LBS/DAY	-	14	-
28B, 2,6-Dinitrotoluene (606- 20-2)	×	×		< 0.00\$	< 0.15	e:	**	**	-	1	PPM	LBS/DAY	-	IH.	-
29B, Di-N-Octyl Phthalate (117- 84-0)	×	×		< 0.005	< 0,15	#.\	.=.			1	PPM	LBS/DAY	-	=	
10B, 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	x	х		< 0.005	< 0,15	#:	**	3	444	1	PPM	LBS/DAY	~	=	
31B, Fluoranthene (206-44-0)	х	×		< 0.005	< 0.15		**	5 3)	-	1	РРМ	LBS/DAY			
32B. Fhiorene (86-73-7)	x	х		< 0.005	< 0.15	**	***	₩:	1 111 1	1	PPM	LBS/DAY	/ *		-
33B, Hexachlorobenzene (118- 74-1)	x	x		< 0.005	< 0.15	=			(4))	1	PPM	LBS/DAY	:#:		-
34B, Hexachlorobutadiene (87- 68-3)	x	×		< 0.005	< 0.15	220	2.27	•		1	РРМ	LBS/DAY	4	2	
35B. Hexachlorocyclopentadiene (77- 47-4)	×	x		< 0.005	< 0.15	200	5425	=	-	3	PPM	LBS/DAY	1800		
36B Hexachloroethane (67-72-	x	x		< 0.005	< 0.15	¥6:	***	er:	: ++ :	1	PPM	LBS/DAY	(44)	#	-
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	×	x		< 0.005	< 0.15		*	•	*	1	PPM	LBS/DAY		i i	
38В Isophorone (78-59-1)	х	x	0 =	< 0.005	< 0 15	₩):	(**)		:#4:	1	PPM	LBS/DAY	*	 :	-
39B Naphthalene (91-20-3)	×	x		< 0.005	< 0.15	440		4	-	1	PPM	LBS/DAY	⊕	>	-
108 Nitrobenzene (98-95-3)	x	х		< 0.005	< 0 15	<u></u>	E	=	*	1	PPM	LBS/DAY	(#	팔	æ
41B N-Nitrosodimethylamine (62-75-9)	×	x		< 0.005	< 0.15	=/	-	÷	(m)	3	РРМ	LBS/DAY	544)	#0	-
42B. N-Nitrosodi- N- Propylamine (621-64-7)	х	x		< 0.005	< 0.15	93	***	*		1	РРМ	LBS/DAY	_	= 0	-

CONTINUED FROM PAGE												OUTFALL NO. 0			
	2	. MARK	'X'				FLUENT				4. UNITS (specify if blank)		Œ (option	zl)
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM D		(if available	e)	c. LONG TERM AV (if available	le)	d No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/	NEUTRAI	L COMPO	UNDS (con	tinued)											
43B. N- Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.15	*	#E	-	*	1	РРМ	LBS/DAY	=:	: **	-
44B. Phenanthrene (85-01-8)	x	х		< 0.005	< 0.15	£	+	1		1	PPM	LBS/DAY	*	÷	4
45B. Pyrene (129-00-0	х	х		< 0.005	< 0.15		-	195	·	1	PPM	LBS/DAY	#3	. 	-
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	×		< 0.005	< 0,15	2	=	2	.	1	PPM	LBS/DAY		245	
GS/MS FRACTION - PESTI	CIDES										1+				
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.0015	**	-	-	·#	1	PPM	LBS/DAY	æ	*	-
2P. α- B HC (319-84-6)	x	х		< 0.00005	< 0.0015	#1	-	:=::	S#5	1	РРМ	LBS/DAY		150	-
3P. β-BHC (319-85-7)	х	x		< 0.00005	< 0.0015	-	25	8	選	1	PPM	LBS/DAY	-	022	
4P. γ-BHC (58-89-9)	x	х		< 0.00005	< 0.0015	1 -	269	=	542	1	PPM	LBS/DAY	(44)	100	-
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.0015	*	** 0.	-	ie.	1	РРМ	LBS/DAY	:e:	18	** 2
6P. Chlordane (57-74-9)	×	x		< 0.0002	< 0.0059	***	-	Net	344	ı	РРМ	LBS/DAY	*		
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.0029	40 2		-		1	PPM	LBS/DAY		136	-
8P. 4,4'-DDE (72-55-9)	x	х		< 0.0001	< 0.0029	77.	=	in .	325	1	РРМ	I.BS/DAY	-	lie.	m.:
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.0029					1	PPM	LBS/DAY	÷	1 <u>22</u>	<u>-</u> :
10P. Dieldrin (60-57-1)	x	х		< 0.0001	< 0.0029	-9	*	=	-	1	PPM	LBS/DAY		144	-
115-29-7)	х	х		< 0.0001	< 0.0029	-	*	:#:	·*	1	PPM	LBS/DAY	*		-
12P. β-Endosulfan (115-29-7)	ж	x		< 0.0001	< 0.0029	-		3	-	1	PPM	LBS/DAY	***	#	-
3P. Endosulfan Sulfate 1031-07-8)	x	x		< 0.0001	< 0.0029	2 00	₩.	-	·#	1	PPM	LBS/DAY	•		-
14P. Endrin 72-20-8	х	x		< 0.0001	< 0.0029	200	74.	ж	234	ì	PPM	LBS/DAY	æ	55	••
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0029	#	#		*	1	PPM	LBS/DAY		#	-
6P. Heptachlor 76-44-8) PA Form 3510-2C (8-90)	x	x		< 0.00005	< 0.0015	1 (1)	*	44	1944	i	PPM	LBS/DAY	-	#1	-

OUTFALL NO. 005

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

	2	. MARK	X'			3. E	FFLUENT				4. UNITS (s)	pecify if blank)	5. INTAI	Œ (optiona	d)
I. Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	AY VALUE	b. MAXIMUM 30 DAY available)		c. LONG TERM AV		d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERM AV	0.00000000000	b. NO. OF
available)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
SMS FRACTION	- PESTIC	IDES (cont	inued)												•
17P. Heptachlor Epoxide (1024-57-3)	*	х		< 0.0001	< 0.0029		755			1	РРМ	LBS/DAY		***	-
18P PCB-1242 (53469-21-9)	x	х		< 0.001	< 0.03	-	57	100	1000	1	PPM	LBS/DAY		# 8	
19P. PCB-1254 (11097-69-1)	х	х		< 0.001	< 0.03		.	*	næ	1	РРМ	LBS/DAY	·	*	
20P. PCB-1221 (11104-28-2)	х	х		< 0.001	< 0.03		-	*	0.00	I	PPM	LBS/DAY		æ:	-
21P. PCB-1232 11131-16-5)	x	x		< 0.001	< 0.03		=		::::::::::::::::::::::::::::::::::::::	1	PPM	LBS/DAY	_		
22P. PCB-1248 (12672-29-6)	x	х		< 0.001	< 0.03	- 3	441			1	PPM	LBS/DAY	-	-	-
23P. PCB-1260 11096-82-5)	x	х	- 1	< 0.001	< 0.03	-	**	-	(1	PPM	LBS/DAY	*	-	-
4P. PCB-1016 12674-11-2)	x	х		< 0.001	< 0.03	-	-	1881	9 #	1	PPM	LBS/DAY	-	=	
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 0.15	=	1	E	J#	1	PPM	LBS/DAY	*	=	

EPA Form 3510-2C (8-90)

Additional Tes		MARK'		sample			3, EFFL	LICAR				UNITS (spe	OUTFALL N		AKE (optional	
	-	, MARK	^									UNITS (Spe	суу у ошк	3, 18 1	AKE (Optional	,
1. Pollutani and CAS NO. (If	a. Testing	b. Believed		a. MAXIMU!	M DAY VAI	LUE	b. MAXIMUM 30 D		c. LONG TERM AV availab		d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERM A	VG. VALUE	b. NO. OF
available)	Required	Prescot	Absent	(1) CONCENTRATION	(2)	MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
Uranium		x		0.00051	0.0150		-				1	PPM	LBS/DAY	-		
2,4-D		ж		< 0.01	< 0.2936		-	**	;**C	i e	1	PPM	LBS/DAY	-	0=	
TI (dissolved)		x		0.0004	0.0117		-		4	44	1	PPM	LBS/DAY	-	744	4
Ti (dissolved)		x		< 0.002	< 0.0587		-	1,55	-	-	1	PPM	LBS/DAY	-		
Sn (dissolved)		х		< 0.005	< 0.1468		**)	744		-	1	PPM	LBS/DAY	-	1.00	+
Se (dissolved)		×		< 0.003	< 0.0881		20	04	-	122	1	PPM	LBS/DAY	-	744	-
Sb (dissolved)		х		100.0	0,0294		-		-	; : :	τ	PPM	LBS/DAY	255		-
Pb (dissolved)		x		< 0.001	< 0.0294		4		-	(#	1	PPM	LBS/DAY	-	#	*
Ni (dissolved)		я		0.01	0.2936		-	14	-		I	PPM	LBS/DAY	100	1.02	40
Mo (dissolved)		x		0.006	0.1761		T	100		-	ī	PPM	LBS/DAY	-		Ę.
He (dissolved)		х		< 0.0002	< 0.0059		-	144	-	TE .	ı	PPM	LBS/DAY	14		4
Cu (dissolved)		×		< 0.001	< 0.0294					-	1	PPM	LBS/DAY	-	11	20
Cr (dissolved)		х		< 0.001	< 0.0294		1	100		-	1	PPM	LBS/DAY	-	-	
Co (dissolved)		×		< 0.0006	< 0.0176			-		- 2	1	PPM	LBS/DAY	-		-
Cd (dissolved)		×		< 0.0003	< 0.0088		1		I		1	PPM	LBS/DAY			**
Be (dissolved)		×	$\overline{}$	< 0.0002	< 0.0059		12-		-	-	1	PPM	LBS/DAY	_		-
Ba (dissolved)	1	х		0.19	5.58		-		122	122		PPM	LBS/DAY		-	
As (dissolved)	_	x		0.01	0.29		1					PPM	LBS/DAY	_		
Ag (dissolved)	+	x		< 0.0001	< 0.0029		-	-		-	1	PPM	LBS/DAY			-
Zn (dissolved)	1	x		< 0.01	< 0.29			Tan .		/_	1	PPM	LBS/DAY		-	_
Mn (dissolved)				0.06	1.76		_				1	PPM	LBS/DAY			
Mg (dissolved)	1	x	-	15,38	451.51				-	_	<u> </u>	PPM	LBS/DAY	-		
Fe (dissolved)	-	x	_	0.06	1.76		-	- B				PPM	LBS/DAY		<u> </u>	
Al (dissolved)	—	x		< 0.09	< 2.64	-	-				1	PPM	LBS/DAY		-	
Total Dissolved Solids		x		452	13269,27	7	-	#C	-	:Œ	1	PPM	LBS/DAY	-	*	
Total Hardness as CaCO3		x		129.96	3815.21			-3	-		1	PPM	LBS/DAY	9 0	#:	
Chlorides as CI		x		153.19	4497.17			¥0	_	72	1	PPM	LBS/DAY			
Hydrogen Sulfide		x		< 0.05	< 1.47		 	_		-	1	PPM	LBS/DAY	-	=	
Chromium +6 as Cr6		×		< 0.005	0.15			-3	-	23	i)	РРМ	LBS/DAY	**:	-	-
Kepone		X		< 0.0001	< 0.0029	-		27		7.0	1	PPM	LBS/DAY	12		
Methoxychlor		x		< 0.0001	< 0.0029				**	-	i	PPM	LBS/DAY		-	
Mirex		X		< 0.0001	< 0.0029						-	PPM	LBS/DAY	-	44	-
Chlorpyrifos		x		< 0.0001	< 0.0029		-	-	-		- i -	PPM	LBS/DAY	-	- The	
Demeton	-			< 0.001	< 0.0039		-		-			PPM	LBS/DAY			_
Diazinon	+	_ x	-	< 0.001	< 0.0294					=		PPM	LBS/DAY	-		
Guthion		X		< 0.001	< 0.0294				-	=	<u> </u>	PPM	LBS/DAY		-	-
Malathion		X		< 0.001	< 0.0294		-			-	1 - 1 -	PPM	LBS/DAY			
	-	x							-		-	PPM	LBS/DAY		-	
Parathion		x			< 0.0294	_			•							
Silvex	1	х		< 0.002	< 0.0587		10	221	_ =		la lasa	PPM	LBS/DAY	-	-	

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.

SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 007

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUENT					3. UNITS (spec	cify if blank	4. INTA	KE (optiona	d)
I. Pollutant	a.1	MAXIMUM DAY VALU	E	b. MAXIMUM 30 DAY available)		c. LONG TERM AV (if availa)		d. No. OF	a. CONCENTRATI	b. MASS	a. LONG TERM AV	/G. VALUE	b. NO. OF
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ON	0.141.00	(I) CONCENTRATION	(2) MASS	ANALYSES
a. Biological Oxyge	en Demand (BOD)	< 3.0	< 25.60	:e	=	1966	=	I	PPM	LBS/DAY		:=	-
b. Chemical Oxyge	en Demand (COD)	9.71	82.84	:==		-	=:	1	РРМ	LB\$/DAY		2#	
c. Total Organic Ca	arbon (TOC)	7.00	59.72	1 -	**3	-	=	1	РРМ	LB\$/DAY		-	
d. Total Suspended	Solids (TSS)	19.4	165.52	0 44	æ	-		1	РРМ	LBS/DAY	-	æ.	ļ.
e. Ammonia (as N)	+	0.06	0.51	144	**	-	*	i	PPM	LBS/DAY	-	100	-
f. Flow	***	VALUE 1.0		VALUE 1.023		VALUE 0.37		15	MGD	22	VALUE -		
g. Temperature (wi	inter)	VALUE 3.4		VALUE _		VALUE		1	°C		VALUE 		
h. Temperature (sui	mmer)	VALUE 29.:		VALUE		VALUE		1	°c		VALUE 		-
і. рН		7.92	7.92	-	**:	7 D N		l.	STANDAL	RD UNITS	<u>\$</u>	1 100	9.1

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. EFI	FLUENT				UNITS (spec	ify if blank	5. INTA	KE (optiona	ıl)
1. Pollutant and CAS NO. (If	b.	c. Believed	a. MAXIMUM I	DAY VALUE	b. MAXIMUM 30 DAY available		c. LONG TERM AV	•	d No. OF	a.	h hrace	a. LONG TERM AV	/G. VALUE	b. NO. OF
available)	Believed Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRATI ON	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)	67-9) X 3.7	3.7	31.567734	977.		y = /:	6	1	PPM	LBS/DAY		257	_	
b. Chlorine, Total Residual	х		< 0.1	< 0.853182	· •	æ	40	·	ï	PPM	LBS/DAY	+:	••	-
c. Color	х		31	a	3 #	=,	-50		1	PCU	-	20	₩ :	
d. Fecal Coliform		x	No Sample	-	124	***		**	-	-	-	-	ms	=
e. Fluoride (16984-48-8)	x		0.103	0.87877746		<u>#</u>	₩.	**	l	PPM	LBS/DAY	# (-	<u> </u>
Nitrate - Nitrite	x		0.84	7.1667288	Ober	*	1.00	3.0858	12	PPM	LBS/DAY	***	-	-

PA Form 3510-2C (8-90)

ITEM V-B CONTINUE	D										OUTFALL NO.	. 007		
	2.MA	RK 'X'			3. E	FFLUENT				. UNITS (Spe	ecify if blank	5. INT	AKE (optiona	l)
1. Pollutant and CAS NO (If available)	a. Believed	b. Believed	a, MAXIMUM	DAY VALUE	b. MAXIMUM 30 (if availa		c. LONG TERM A (if availab		d No. OF ANALYSES	a CONCENTRA	b. MASS	a. LONG TERM A	VG. VALUE	b. NO. OF
	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATIO	(2) MASS	(I) CONCENTRATION	(2) MASS	ļ. 			(1) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		< 0.3	< 2.56		.e.		J.	ı	PPM	LB\$/DAY	385	=	=
h. Oil & Grease	х		< 5	< 42.66	*	*	(iii)	14	1	PPM	LBS/DAY			==
i. Phosphorus (as P), Total (7723-14-0)	x		< 0.1	< 0.85	144	**	: <u>**</u>	=	1	PPM	LBS/DAY	·	-	***
j. Radioactivity														
(1) Alpha		х	< 1.94		-	5 4 21	300		1	pCi/L	_	-	-	¥
(2) Beta	SING	x	< 2.17	_	æ	227	*	4	1	pCi/L	=:	72	7.AV	2
(3) Radium, Total		x	in the second	-	:=:	*	: ** :	14	1	pCi∕L	=	·		-
(4) Radium 226, Total		x	166			-	144	14-	ı	pCi∕L	-	=		-
k. Sulfate (as SO 4) (14808-79-8)	×		20.29	173.11	-	2007 2007	F	#	1	PPM	LBS/DAY	1225	725	-
l. Sulfide (as 5)	x		< 0.05	< 0.43	=	=		2	1	PPM	LBS/DAY	3	:	-
m. Sulfite (as SO ₃) (14265-45-3)		x	No Sample	: <u>#</u>	-	-	-	-	1.64	38	**	; = :	±±±	-
n. Surfactants	x		< 0.01	< 0.09	2. 2.2.	=	144	=	I	PPM	LBS/DAY	544	*	a a
o. Aluminum, Total (7429-90-5)	x		0.46	3.92			1.55	-	1	PPM	LBS/DAY	-)#I	Š
p. Barium Total (7440-39-3)	x		0.066	0.56	*	••	*		1	PPM	LBS/DAY	-	1#1	-
q. Boron, Total (7440- 42-8)	x		< 0.02	< 0.17	=	\$60 600		-	1	PPM	LBS/DAY		·	-
r. Cobalt, Total (7440- 48-4)	x		< 0.0006	< 0.01	5		-		1	PPM	LBS/DAY	-		ē.
s. Iron, Total (7439- 89-6)	х		1.08	9.21	ita;	**		-	1	РРМ	LBS/DAY		-	
t. Magnesium, Total (7439-95-4)	х		5.28	45.05	: - :	-	:##		1	PPM	LBS/DAY	-	-	-
u. Molybdenum, Total (7439-98-7)	х		< 0.001	< 0.01	(4)	R	*	<u>u</u>	ı	РРМ	LB\$/DAY	.	722	
v. Manganese, Total (7439-96-5)	х		0.09	0.77	-	***			1	PPM	LBS/DAY	- 	3.55	-
w. Tin, Total (7440- 55 -5)	x		< 0.005	< 0.04	1 4e t	. €:	786	144	1	РРМ	LBS/DAY	-	**	-
70-5) Titanium, Thal (7440-32-6)	x		< 0.002	< 0.02	=	¥5	120	14	Ţ	PPM	LBS/DAY	744	2	-

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenois. If you are not required to mark column 2-a (secondary industries, nanprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe its present. Mark "X" in column 2-b for each pollutant, you must provide the results of at least one analysis for that pullutant if you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pullutant if you know or have reason to believe it will be discharged in concentrations of 100 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, you must provide the results of at least one analysis for that pullutant which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See Instructions for additional details and requirements

Part C.															
	2	MARK	'X'				FFLUENT				4. U	NITS	5. INTA	KE (option	al)
I. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	AY VALUE	b. MAXIMUM 30 l (if availa		c. LONG TERM AV (if availab		d. No. OF	a. CONCENTR	b. MASS	a. LONG TERM VALUE		b. NO. OF
No. (Il avallable)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ATION	D. MA35	(I) CONCENTRATION	(2) MASS	ANALYSES
METALS, CYANIDE,	AND TOT.	AL PHENO	DLS												
1M. Antimony, Total (7440-36-0)	х	х		< 0.001	< 0.01		-	iss.	5 50	1	PPM	LBS/DAY	i.ee	:==	-
2M. Arsenic, Total (7440-38-2	х	х		< 0.003	< 0.03		=	28	_	(1)	PPM	LBS/DAY	Agill 1	nie –	22
3M. Beryllium, Total (7440-41-7)	х	х		< 0.0002	< 0.00	ж. -	-	=	**	1	РРМ	LBS/DAY	-	-	
4M. Cadmium, Total (7440-43-9)	х	х		< 0.0003	< 0.00	-			-	1	РРМ	LBS/DAY		-	
5M. Chromium, Total (7440-47-3)	х	х		< 0.02	< 0.17	10 	-	**	**	1	PPM	LBS/DAY		D e	-
6M. Copper, Total (7440-50-8)	x	х		0.003	0.03	3		1 110		1	РРМ	LBS/DAY	11.000	. 	
7M. Lead, Total (7439-92-1)	х	х		< 0.001	< 0.01			len.	##.	1	РРМ	LBS/DAY		-	5
8M. Mercury, Total (7439-97-6)	х	х		< 0.0002	< 0.0017	-	; 		-	I	PPM	LBS/DAY	1550)) <u>=</u> ;	æ
9M, Nickel, Total (7440-02-0)	х	х		< 0.005	< 0.04	-	#	*	2	1	PPM	LBS/DAY	•	1321	
10M. Selenium, Total (7782-49-2)	x	х		< 0.003	< 0.03	*	125	155		1	РРМ	LBS/DAY		:#:	920
11M. Silver, Total (7440-22-4	х	х		< 0.0001	< 0.0009		144	160	=	ı	PPM	LBS/DAY	: **	-	
12M. Thallium, Total (7440-28-0)	х	х		0.0002	0.0017		(**		1	PPM	LBS/DAY	#	*	
13M. Zinc, Total (7440-66-6)	x	х		0.014	0.12	Der 1	2 4	(##		1	РРМ	LBS/DAY	***	T ·	
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 0.09			ien.		1	PPM	LBS/DAY	w)	#.	
I 5M. Phonois,	x	х		< 0.01	< 0.09		*	護	-	1	PPM	LBS/DAY	=	**	<u>117</u>
COXIN															
39,7,8- Tetrachlorodibenzo-P Dioxin (1764-01-6)			х	DESCRIBE RE	SULTS	No Sample	K						4		

CONTINUED FROM PAGE V-3	1 2	MADY	וטו				MM 1 1242 10-					OUTFALL NO. 0		17777	
1. Pollutant and CAS NO. (If	a.	MARK b.	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM : VALUE (if ava		c. LONG TERM A		d. No. OF	a.	pecify if blank	5. INT a. LONG TEI VALU		b, NO, O
available)	Testing Required	Believed Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b, MASS	(1) CONCENTRAT ION	(2) MASS	ANALYSI
GC/MS FRACTION - VOL	ATILE C	OMPOU	JND\$												
IV. Accrolein (107-02-8)	x	х		< 0.01	< 0.09	:## i	-		•	1	PPM	LBS/DAY	(#)	155	77
2V. Acrylonitrile 107-13-1)	x	х		< 0.0015	< 0.01		(42) (1)	5	627	1	РРМ	LBS/DAY	-	V.5	201
3V. Benzene (71-43-2)	х	х		< 0.0044	< 0.04	(44)	**	#	223	1	PPM	LBS/DAY	-	(##	
V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required	S						
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 0.04	<i>i</i>	<u>\$2</u> 7	2	127	1	PPM	LBS/DAY	-	TE	1
6V, Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 0.02	3	98		#	1	PPM	LBS/DAY	144	ä	
7V. Chlorobenzene (108-90-7)	x	х		< 0.006	< 0.05	-	### ##################################	-	112		PPM	LBS/DAY	\ -	æ	e:
V. Chlorodibromomethane [124-48-1]	x	х	12	< 0.0031	< 0.03	-	*	***	æ	1	РРМ	LBS/DAY	:##		===
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 0.01	:-	*	-	: = :	1	PPM	LBS/DAY	i.e.	-	##.
10V, 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 0.01	-	#5	5 00	-	1	РРМ	LBS/DAY	##	#	•
IIV, Chloroform (67-66-3)	x	х		< 0.016	< 0.14	=	#2	750	=	1	РРМ	LBS/DAY	#	-	
(2V. Dichlorobromomethane (75-27-4)	x	х		< 0.0022	< 0.02	-	20	Δ.		1	РРМ	LBS/DAY	: -		-
3V. Dichlorodifluoromethane 75-71-8)				Not Required		Not Required		Not Required							
4V. 1,1-Dichloroethane 75-34-3)	х	x		< 0.0047	< 0.04	**	*		***	1	PPM	LBS/DAY	:#	21	=
5V. 1,2-Dichloroethane 107-06-2)	х	х		< 0.0028	< 0.02	377.	**	#1	-	1	PPM	LBS/DAY	u n	50/2	-
6V. 1,1-Dichloroethylene 75-35-4)	x	x		< 0.0028	< 0.02	2#2	**	1 W		1	РРМ	LBS/DAY	844	21	-
7V. I,2-Dichloropropane 78-87-5)	х	х		< 0.006	< 0.05	A)	**	J	РРМ	LBS/DAY	:	-	
8V. 1,3-Dichloropropylenc 542-75-6)	х	х		< 0.0059	< 0.05	*	(40)	#/	**	1	PPM	LBS/DAY	: ##	**:	
9V. Ethylbenzene 100-41-4)	x	х		< 0.0072	< 0.06	(#E)	×	***	===	1	PPM	LBS/DAY	l cas	m.	
0V. Methyl Bromide (74-83-9)	х	x		< 0.0014	< 0.01	*	₩		20	1	РРМ	LBS/DAY	: 44	263	
V. Methyl aloride (74-87-3) PA Form 3510-2C (8-90)	х	х		< 0.0011	< 0.01	-	#	-	-	1	PPM	LBS/DAY	-		

CONTINUED FROM PAGE V-	1											OUTFALL NO. 00	07		
	2.	MARK'	Χ,				FFLUENT				4. UNITS (specify if blank)	5. INTAK	Œ (optiona	<i>d</i> }
Pollutant and CAS NO. (If available)	a. Testing	b.	c,	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA (if available		c. LONG TERM AVG available		d. No. OF	a		a. LONG TERM VALUE		b. NO. OF
Evatiable)	Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MAŞS	ANALYSES	CONCENTRA	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION - VOLATIL	E COMPO	UNDS (co	ntinued)												
22V. Methylene Chloride (75-09-2)	×	x		< 0.0028	< 0.02	-	a :		<u>.</u>	1	PPM	LBS/DAY	24	+	-
23V. 1,1,2,2- Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 0.06		. a)	=	# ()	Ĭ,	PPM	LBS/DAY	a n	-	
24V. Tetrachloroethylene (127-18-4)	x	х		< 0.0041	< 0.03	1		-	Ŧ	1	РРМ	LBS/DAY	摄 .	Ē	8
25V. Toluene (108-88-3)	x	x		< 0.006	< 0.05		#20		-	1	РРМ	LBS/DAY	-	=	
26V. 1,2-Trans- Dichloroethylene (156-60-5)	x	×		< 0.0016	< 0.01	2	8	4	•	ı	PPM	LBS/DAY	i della	-	ш
27V. 1,1,1-Trichloroethane (71-55-6)	x	X.		< 0.0038	< 0.03	-	=:	=		E	РРМ	LBS/DAY	155	7 .1	<u>.</u> .
28 V. 1,1,2-Trichloroethane (79-00-5)	х	x		< 0.005	< 0.04	*	*	-	**	1	PPM	LBS/DAY	-	.	-
29V Trichloroethylene (79-01-6)	X	x		< 0.0019	< 0.02	-		-		ì	PPM	LBS/DAY	-	-	_
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.02	*	÷	*		1.	PPM	LBS/DAY	22	\$	=
31 V. Vinyl Chloride (75-01-4)	x	x	====	< 0.0018	< 0.02	3	-	-	÷	1	PPM	LBS/DAY	=	2 0	<u> </u>
GC/MS FRACTION - ACID COL	MPOUNDS	3													
IA. 2-Chlorophenol (95-57-8)	x	×		< 0.005	< 0.04	**	-	***	4	1	PPM	LBS/DAY		+	-
2A. 2,4-Dichlorophenol (120-83-2)	х	x		< 0.005	< 0.04	-	=:		-	1	PPM	LBS/DAY	=	***	
3A. 2,4-Dimethylphenol (105-67-9)	x	х		< 0.005	< 0.04	200	-	(<u>11</u>	2	1	PPM	LBS/DAY	2.1	-	_
4A. 4,6-Dinitro-OCresol (534-52-1)	x	R		< 0.005	< 0.04	-	3	-	Ē	1	РРМ	LBS/DAY	¥	12-	4
5A. 2,4-Dinitrophenol (51-28-5)	X.	x		< 0.005	< 0.04	*	3		#	1	PPM	LBS/DAY	#*	=	-
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.005	< 0.04	# 0	#20		=	1	PPM	LBS/DAY	EN.	8	-
7A. 4-Nitrophenol (106-02-7)	х	x		< 0.005	< 0.04	-	=	:E		1	PPM	LBS/DAY	57.1	#0	8 9
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.005	< 0.04	-	=	=	-	1	PPM	LBS/DAY	=		=0
9A. Pentachlorophenol (87-86-5	x	x		< 0.005	< 0.04	-	-	-	#	1	РРМ	LBS/DAY	####	-	-
(87-86-5 A. Phenol D08-95-2) TA. 2,4,6-Trichlorophenol	x	х		< 0.005	< 0.04	*:	**	-	_	1	PPM	LBS/DAY	en en	*	-
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.005	< 0.04	-	*	-		1	РРМ	LBS/DAY			-

CONTINUED FROM PAGE V-5													OUTFALL NO. 0	07		
	2.	MARK '	X'			3	. EFFLU	ENT				4. UNITS (sp	ecify if blank)	5. INTAK	CE (optiona	al)
1. Pollutant and CAS NO. (If		b.	c.	a. MAXIMUM DA	YVALUE			LUE	c. LONG TERM AT			a,		a LONG TERM		
available)	a. Testing Required	Believed	Believed	(1)	(2)	(if availal	ne)	_	availabi		d. No. OF ANALYSES	CONCENTRATI	b. MASS	VALUE		b. NO. OF ANALYSES
	,	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) }	ASS	(1) CONCENTRATION	(2) MASS		ON		(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEU	TRAL CO	MPOUND	S													
1B. Acenaphthene (83-32-9)	x	x		< 0.005	< 0.04	э н	::		₩:	-	1	РРМ	LBS/DAY	#0	135	-
2B. Acenaphtylene (208-96-8)	х	×		< 0.005	< 0,04	5#±			=	=	(I)	PPM	LBS/DAY	(F)		-
3B, Anthracene (120-12-7)	x	x		< 0.005	< 0.04	==			E1	144	215	PPM	LBS/DAY	40		
4B Benzidine (92-87-5)	x	x		< 0.005	< 0.04		-		 .	· ·	1	PPM	LBS/DAY	*	*	-
5B. Benzo (a) Anthracene (56-55-3)	×	x		< 0.005	< 0.04	S**	199		-	198	1	PPM	LBS/DAY	-	*	
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.005	< 0.04	(¥	16		#1	·	1	РРМ	LBS/DAY	250	4	
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0 005	< 0.04		74		-:	344	1	PPM	LBS/DAY	#:	·*	
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.04	:**	-		=	399	ı	PPM	LBS/DAY	=0	-	
9B. Benzo (k) Fluoranthene (207- 08-9)	x	x		< 0.005	< 0.04	SME.	-	22011	-	\tag	i	РРМ	LBS/DAY *	ŧ.		
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	х	x		< 0.005	< 0.04	N==	-		=:).1 51	i.	РРМ	LB\$/DAY	*	32	-
11B. Bis (2-Chloroethyl) Ether (111-44-4)	х	x		< 0.005	< 0.04	194			-	-	i	PPM	LBS/DAY		15	-
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	х	х		< 0.005	< 0.04	1 800			#4		t)	PPM	LBS/DAY	575		•
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	х		< 0.005	< 0.04	V#	21		=	-	1	PPM	LBS/DAY	= ,	-	-
14B 4-BromophenylPhenyl Ether (101-55-3)	×	×		< 0.005	< 0.04	: :	#0		*	-	ï	PPM	LBS/DAY	*		-
15B. Butyl Benzyl Phthalaie (85- 68-7)	×	×		< 0.005	< 0.04						1	РРМ	LBS/DAY		V-22	-
16B 2-Chloronaphthalene (91-58- 7)	x	x		< 0.005	< 0.04	722	=1		4 0	-	1	РРМ	LBS/DAY	-		-
17B_4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.005	< 0.04	-	 :		₩		1	PPM	LBS/DAY	·		-
18B. Chrysene (218-01-9)	х	x		< 0.005	< 0.04	165				**.	1	РРМ	LBS/DAY	-	#	Ħ
19B Dibenzo (a,h) Anthracene (53-70-3)	x	х		< 0.005	< 0.04	1=	-			221	ı	РРМ	LBS/DAY	\$46 \$	H0	<u></u>
0B. 1,2-Dichlorobenzene (95-50-)	х	x		< 0.005	< 0.04		-		3 4 0	**	1	PPM	LBS/DAY	-	5	-
21B 1,3-Di-chlorobenzene (541-73-1)	x	х		< 0.005	< 0 04	=	B		7	#4	# # F	РРМ	LBS/DAY	*	-	

CONTINUED FROM PAGE V-												OUTFALL NO 0			
	2.	, MARK	X'				FFLUENT				4. UNITS (specify if blank)		KE (option	al)
Pollutant and CAS NO (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA		b. MAXIMUM 30 D (if availab	le)	(if available	e)	d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NE	UTRAL CO	OMPOUN	DS (continu	ned)											
22B. 1,4-Dichlorobenzene (106- 46-7)	х	x		< 0.005	< 0.04	#	121	<u>\$</u>	*	1	PPM	LBS/DAY	**	==	-
23B 3,3-Dichlorobenzidine (91- 94-1)	×	х		< 0.005	< 0.04	4	a	ŭ.	*	1	PPM	LBS/DAY	144	-	-
24B Diethyl Phthalate (84-66- 2)	х	x		< 0.005	< 0 04		1981	**	×	1	РРМ	LBS/DAY	3 4 5	æ	-
25B Dimethyl Phthalate (131 - 11-3)	x	x		< 0 005	< 0.04	II.		22/1	e e	1	PPM	LBS/DAY	4	82	-
26B. Di-N-Butyl Phthalate (84- 74-2)	x	x		< 0.005	< 0.04	es es	*	₩.c	366	1	РРМ	LBS/DAY	•	-	-
27B 2,4-Dinitrotoluene (121- 14-2)	x	x		< 0.005	< 0.04	₩ ()		-:	3#	1	PPM	LBS/DAY	200	ie.	••
28B 2,6-Dinitrotoluene (606- 20-2)	х	x		< 0.005	< 0.04		-		1995	1	PPM	LBS/DAY	222	853	
29B Di-N-Octyl Phthalate (117- 84-0)	×	×		< 0.005	< 0.04	##.U	π.	5		1	PPM	LBS/DAY	-	144	
30B 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	x	x		< 0,005	< 0.04	_	-	2 0	(#E	1	PPM	LBS/DAY	5 44 5	-	
31B Fluoranthene (206-44-0)	х	x		< 0.005	< 0.04	##)		81	:m:	ı	PPM	LBS/DAY	=	70	-
32B. Fluorene (86-73-7)	к	x		< 0,005	< 0.04	96)	***			1	РРМ	LBS/DAY	:**		-
33B. Hexachlorobenzene (118- 74-1)	×	×		< 0.005	< 0.04		\$#*	ω.	344	1	РРМ	LBS/DAY	**	-	-
34B Hexachlorobutadiene (87- 68-3)	x	x		< 0.005	< 0.04	*	*	₩(#	1	РРМ	LBS/DAY		-	
35B. Hexachlorocyclopentadiene (77- 47-4)	×	x		< 0.005	< 0.04		323	27	324	1	PPM	LBS/DAY	396		
36B Hexachloroethane (67-72-1)	x	×		< 0.005	< 0.04	***		=	-	1	PPM	LBS/DAY	:#:	-	-
37В. Indeno (<i>1,2,3-cd</i>) Рутепе (193-19-5)	к	х		< 0.005	< 0.04		NTV.	#8	₩ <u></u>	t	PPM	LBS/DAY	#	Δir.	-
38B. Isophorone (78-59-1)	х	х		< 0.005	< 0.04	**	**	*	æ	1	PPM	LBS/DAY	7.00	#2	-
39B. Naphthalene (91-20-3)	×	х		< 0.005	< 0.04	148°	1947	¥1	:#	1	PPM	LBS/DAY	3 4 6	**	-
40B. Nitrobenzene (98-95-3)	x	х		< 0.005	< 0.04	255	-	=		1	PPM	LBS/DAY	•	<u> </u>	H
41B. N-Nitrosodimethylamine (62-75-9)	x	х		< 0.005	< 0.04	-	54F	tel	199	1	PPM	LBS/DAY	£	-	i.
42B. N-Nitrosodi- N- Propylamine (621-64-7)	x	х		< 0.005	< 0.04	-	÷	-	æ	1	РРМ	LBS/DAY	N2	a)	-

CONTINUED FROM PAGE	V-7											OUTFALL NO. 0			
	2	. MARK	'X'			3. El	FLUENT				4. UNITS (specify if blank)		Œ (option	<i>u</i> ()
1. Pollutant and CAS NO. (If available)	a. Testing	b, Believed	c. Believed	a. MAXIMUM D	AY VALUE	b. MAXIMUM 30 D. (if availabl		c. LONG TERM AV (if availabl		d No. OF	a.	b. MASS	a. LONG TERM VALUE	I AVG.	b. NO. OI
(ii available)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	0. MASS	(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE/	NEUTRAL	L COMPO	UNDS (cor	ntinued)											
13B. N- Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.04		25	(m)	=	1	PPM	LBS/DAY	# 3		-
44B. Phenanthrene (85-01-8)	х	х		< 0.005	< 0.04	#1	~	Sept.	2005 2005	3	PPM	LBS/DAY	#2	=	
45B. Pyrene (129-00-0	х	х		< 0.005	< 0.04	##:	-	₩.	-	1 -	PPM	LBS/DAY	a)		
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.005	< 0.04	=		-	:#:	L	PPM	LBS/DAY		I#	
GS/MS FRACTION - PESTI	CIDES							101.311							
1P. Aldrin (309-00-2)	х	x		< 0.00005	< 0.0004	#	2	-		1	PPM	LBS/DAY	·	a	
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.0004	#/	**)	·	1	PPM	LBS/DAY	-	:==	-
3P. β-BHC (319-85-7)	х	x		< 0.00005	< 0.0004	72			:#	1	PPM	LBS/DAY	201	æ.	
4P. γ-BHC (58-89-9)	х	x		< 0.00005	< 0.0004	3 0	-	-		1	PPM	LBS/DAY	#	(2) =3:3:	2
5P. 8-BHC (319-86-8)	х	х		< 0.00005	< 0.0004	ω.	-	=		1	PPM	LBS/DAY	\$40 (40)	7,64	#0
6P. Chlordane (57-74-9)	x	×		< 0.0002	< 0.0017	2:	120	+	Na.	1	PPM	LBS/DAY	**	9 22	¥:
7P. 4,4'-DDT (50-29-3)	х	x		< 0.0001	< 0.0009	*	-			1	РРМ	LBS/DAY	-	ii <u>i</u>	
8P. 4,4'-DDE (72-55-9)	х	x		< 0.0001	< 0.0009	2	-	144	34	1	РРМ	LBS/DAY	S46	(94)	-
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.0009	#	=	*	:#*	1 ,	PPM	LBS/DAY	75	055	=0
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.0009	=	*		c#	1	PPM	LBS/DAY	<u>a</u>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	440
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0009	=	-	14	72	1	PPM	LBS/DAY	341	-	
12P. β-Endosulfan (115-29-7) 13P. Endosulfan	к	x		< 0.0001	< 0.0009	= :		-		ι	PPM	LBS/DAY		-	**
Sulfate 1031-07-8}	x	x		< 0.0001	< 0.0009	9.	#	=	æ	1	РРМ	LBS/DAY	₩		ř
14P, Endrin (72-20-8	×	_ x		< 0.0001	< 0.0009	#II	-	3	3348	ı	РРМ	LB\$/DAY	æ	#	
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0009	20 0	*	=	3=	l	РРМ	LBS/DAY	·	1 22 1	
6P. Heptachlor (76-44-8)	х	х		< 0.00005	< 0.0004	-	*	#		1	РРМ	LB\$/DAY	2	447	-

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774 OUTFALL NO. 007

CONTINUED FROM PAGE V-8

CONTINUED FRO	M PAUE V	/-8													
	2	. MARK	'X'			3. EFFLUENT						pecify if blank)	5. INTAKE (optional)		
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	AY VALUE	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERM AVG. VALUE		B. NO. OF
	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	0.1.2.2.0	(I) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION	- PESTIC	IDES (con	inued)												
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.0009		<u>.</u>	=		1	РРМ	LBS/DAY	=	11	
18P. PCB-1242 (53469-21-9)	x	х		< 0.001	< 0.01	12	-	221	120	1	РРМ	LBS/DAY	-	#7	#3
19P. PCB-1254 (11097-69-1)	x	х		< 0.001	< 0.01	-	•0	***	-	1	РРМ	LBS/DAY	-		-
20P. PCB-1221 (11104-28-2)	х	x		< 0.001	< 0.01	-	-	=	-	1	PPM	LB\$/DAY	-	#V	 .
21P. PCB-1232 (11131-16-5)	х	х		< 0.001	< 0.01	-	220	₽ſ.	12	1	PPM	LBS/DAY	-	4 1	
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 0.01	-	H2	-	-	1	РРМ	LB\$/DAY		**:	-
23P. PCB-1260 (11096-82-5)	х	×		< 0.001	< 0.01		575	-	-	1	PPM	LBS/DAY	#L	E .	-
24P. PCB-1016 (12674-11-2)	x	х		< 0.001	< 0.01		<u> </u>		18	1	РРМ	LBS/DAY	#/	-	Acq.
25P. Toxaphene (8001-35-2)	х	x		< 0.005	< 0.04	=	40	=2	-	1	PPM	LBS/DAY	40		-

EPA Form 3510-2C (8-90)

	2	MARK ?	Y				3. EFFL	UENT				. UNITS (spe	cify if blank	5. INT	5. INTAKE (optional)		
1. Pollutant and CAS NO. (If		b. Believed	a Believed	a. MAXIMU	IM DAY VALUE		b. MAXIMUM 30 E (if availab		c, LONG TERM AV	,,,	d. No. OF	a. CONCENTRA	b. MASS	a LONG TERM AVG. VALUE		b. NO. OF ANALYSES	
available)	Required	Present	Absent	(I) CONCENTRATION	(2)	MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION	5, 1, 5, 5, 5	(1) CONCENTRATION	(2) MASS	ANALYSES	
Jranium		х		< 0.21	< 1.7917			-	-	-	1	PPM	LBS/DAY				
.,4-D		x	-AVE	< 0.01	< 0.0853			-	-		1	PPM	LBS/DAY	-		-	
[] (dissolved)		X.		< 0.0002	0.0017				-	225	1	PPM	LBS/DAY	**		-	
Γi (dissolved)		x		< 0.002	< 0.0171			#	-		1	PPM	LBS/DAY	· ·	-		
En (dissolved)		х		< 0.005	< 0.0427		-			-	- 1	PPM	LBS/DAY	099			
Se (dissolved)		X		< 0.003	< 0.0256		¥3		14	174	1	PPM	LBS/DAY	N# 12 12 12 12 12 12 12 12 12 12 12 12 12	22		
(dissolved)		x		< 0.001	0.0085					-	1	PPM	LBS/DAY	-	22		
Pb (dissolved)		x		< 0.001	< 0.0085		***		-	-	1	PPM	LBS/DAY				
Vi (dissolved)		х		< 0.005	0.0427				_		$\overline{}$	PPM	LBS/DAY	-		_	
Mo (dissolved)		I.		< 0.001	0.0085					1.00	<u> </u>	PPM	LBS/DAY				
Ig (dissolved)	1	X.		< 0.0002	< 0.0017		***	-	-		743 MAG	PPM	LBS/DAY	-			
Cu (dissolved)	1	X		0.003	< 0.0256		220			100	-	PPM	LBS/DAY	1 12	2		
Cr (dissalved)	 	x		< 0.003	< 0.0085			-	-			PPM	LBS/DAY	-		_	
Co (dissolved)	1			< 0.0006	< 0.0051		-2				<u> </u>	PPM	LBS/DAY	-			
Cd (dissolved)	1	X		< 0.0003	< 0.0031						1	PPM	LBS/DAY			050	
	-	x	_		< 0.0020							PPM	LBS/DAY			-	
Be (dissolved)	1	х	-	< 0.0002			3 3	-			1	PPM	LBS/DAY	-			
3a (dissolved)	1	X	-		0.3413		23			122	1	PPM			**	**	
As (dissolved)	-	х	_	< 0.003 < 0.0001	< 0.0256		-			-		PPM	LBS/DAY LBS/DAY				
Ag (dissolved)	-	x	_				-3	-	7	-	1	PPM			-1,		
In (dissolved)	-	X.		0.01	< 0.0853						-	$\overline{}$	LBS/DAY	4		-	
vIn (dissolved)	\vdash			< 0.02	< 0.1706				-			PPM	LBS/DAY			-	
Mg (dissolved)		x		5.13	43.77			**		(100	- 1	PPM	LBS/DAY	J=0. 1	***		
e (dissolved)	-	х		1.0	0.85				944		1	PPM	LBS/DAY		***		
(dissolved) Total Dissolved	\vdash	х	_	< 0.09	< 0.77				-		1	PPM	LBS/DAY			-	
iolids		x		164	1399.22		880.	-	·**	-	1	PPM	LB\$/DAY	100	=		
Total Hardness as CaCO3		x		88.92	758.65		=	# 5	100	-	1	PPM	LBS/DAY		**/	-	
Chlorides as Cl		х		17.58	149.99		_	**			i	PPM	LBS/DAY	1 	**		
lydrogen Sulfide		x		< 0.05	< 0.43		227	223			1/	PPM	LBS/DAY		-	-	
Chromium +6 as		X		< 0.005	< 0.0427		110 1	**	·	197	1	PPM	LBS/DAY	57 8	25	-	
Серове		×		< 0.0001	< 0.0009				-			PPM	LBS/DAY			-	
Aethoxychlor	1	x		< 0.0001	< 0.0009		25		-		1	PPM	LBS/DAY		**		
Airex		*		< 0.0001	< 0.0009							PPM	LBS/DAY				
Talorpyrifos	\vdash	x		< 0.0001	< 0.0017		92)		-	140	<u> </u>	PPM	LBS/DAY				
Demoton		X		< 0.0002	< 0.0017		2			12/	1	PPM	LBS/DAY	-	12		
Diazioon	 	X		< 0.001	< 0.0085						1	PPM	LBS/DAY			_	
Juthion				< 0.001	< 0.0085							PPM	LBS/DAY				
Malathion	-	х.		*****	< 0.0085			120			-	PPM	LBS/DAY	_	***		
	-	x	_		_	_		-2-2				PPM	LBS/DAY	-	-	-	
arathion		X	_	< 0.001 < 0.002	< 0.0085		<u>-</u>			= =	9)	PPM	LBS/DAY	[] 785 245			

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.

SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO. 201

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUE	NT				3. UNITS (specif	y if blank)	4. INTAKE (optional)		
1. Pollutant	a. MA	JULIAV YAD MUMEK		b. MAXIMUM 30 DAY available			c. LONG TERM AVG. VALUE (if availale)		a CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF
		(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES		0.112100	(1) CONCENTRATION	(2) MASS	ANALYSE
a Biological Oxyg	en Demand (BOD)	No Sample	-	-	**	-		0	PPM	LBS/DAY	##00	3 44	
o. Chemical Oxyge	en Demand (COD)	No Sample	**	•	-			0	PPM	LBS/DAY	===	8 2	
. Total Organic Carbon (TOC)		No Sample	.=		=	**.	=	0	PPM	LBS/DAY	*	÷	-
d Total Suspended	Solids (TSS)	No Sample		I#S		jin .	***	0	PPM	LBS/DAY) 	-
e. Ammonia (as N)		No Sample	=	720	F20	₩.	3 20	0	РРМ	LBS/DAY	#3	6447.	=
f. Flow		VALUE 5.8		VALUE 4.9		VALUE		32	MGD		VALUE 		-
g Temperature (wi	inter)	VALUE No Sam	ple	VALUE		VALUE _		0	°C		VALUE	1000 00 Hea	-
n. Temperature (su	mmer)	VALUE No Sam	ple	VALUE			VALUE		°C		VALUE		
i. pH		7.46	8.75	b-1		en - spang en s en-	4 VIII	32	STANDARI	UNITS		ent state (Mek T

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3.1	EFFLUENT	4. UNITS (specif	y if blank)	5. INTAKE (optional)					
1. Pollutant and CAS NO. (If available)	b.	c.	a. MAXIMUM DAY VALUE		b, MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if availale)		d. No. OF	. CONCENTRATION	1 1/100	a. LONG TERM AVG, VALUE		b. NO. OF
	Believed Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)		х	No Sample		-	-		1	0	PPM	LBS/DAY		350	220
b. Chlorine, Total Residual	U	х	No Sample	=		ug:		-	0	PPM	LBS/DAY		940	
c Color		x	No Sample	S22	=	221	:==		0	NTU	\.		9400	:
d. Fecal Coliform		x	No Sample		##C:	**		:##	0	COL/100ml			**	-
e. Fluoride (16984-48-8)		х	No Sample	: **	-	**			0	PPM	LBS/DAY	-	**	=
f. Nitrate - Nitrite (as N)		x	No Sample	=	P 0	=	572: 	-	0	PPM	LBS/DAY	Ψ.	篗	u er

EPA Form 3510-2C (8-90)

ITEM	V-B	CONTINUED
_		

TEM V-B CONTINUE											OUTFALL NO			
	2.MA	RK 'X'									ecify if blank)	5. INTAKE (optional)		d)
I. Pollutant and CAS NO. (If available)	a. Believed	b. Believed	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	CONCENTRA	b. MASS	a. LONG TERM A	VG VALUE	b. NO. OI
40	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALYSE
C/MS FRACTION					,									
, Nitrogen, Total Organic (as N)	200	x	No Sample						0	PPM	LBS/DAY	***		-
Oil & Grease		x	No Sample	-	_	<u> </u>			0	РРМ	LBS/DAY		**	-
Phosphorus (as P), Total (7723-14-0)		x	No Sample				140	-	0	PPM	LBS/DAY			4
. Radioactivity														
I) Alpha		x	No Sample					40	0	pCi/L			540	_
(2) Beta		x	No Sample		:#*		-	***:	0	pCi/L		- 		
(3) Radium, Total		х	No Sample				æ	#2	0	pCi/L	-			
(4) Radium 226, Total		x	No Sample		-	200			0	pCi/L				
k. Sulfate (ax SO ₄) (14808-79-8)		x	No Sample						0	PPM	LBS/DAY	#		
Sulfide (as S)		x	No Sample		-		OFF.		0	РРМ	LBS/DAY	**		_
m. Sulfite (as SO ₃) (14265-45-3)		×	No Sample	· #	522				0	РРМ	LBS/DAY		784	-
. Surfacants		x	No Sample	-	**				0	PPM	LBS/DAY	•		_
o. Aluminum, Total (7429-90-5)		×	No Sample		-	-	See	**:	0	РРМ	LBS/DAY		175	-
p. Barium Total (7440-39-3)		х	No Sample	;aq			500		0	РРМ	LBS/DAY	-	-	
q. Boron, Total (7440- 42-8)		x	No Sample	-					0	PPM	LBS/DAY			22.1
r. Cobalt, Total (7440- 48-4)		x	No Sample	_				-	0	PPM	LBS/DAY	-		_
Iron, Total (7439-		x	No Sample		844				0	РРМ	LBS/DAY		-	
Magnesium,		x	No Sample				200	257	0	РРМ	LBS/DAY		S#4	_
i. Molybdenum, Total (7439-98-7)			No Sample		-		180		0	PPM	LBS/DAY			
. Manganese, Total (7439-96-5)		×	No Sample		-	<u> </u>		-	0	PPM	LBS/DAY			_
v. Tin, Total (7440-		X			_		-	_	0	PPM	LBS/DAY			_
61-5) c. Titanium, Fotal (7440-32-6)		х	No Sample No Sample						0	PPM	LBS/DAY			

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and monrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

Part C.	T :	MARK'	X'	20 H		3. EI	FFLUENT			55776	4. L	NITS	5. INTA	KE (optional)
1. Pollutant and CAS	a. Testing	b.	C.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA		c. LONG TERM AV (if availab		d. No. QF	a.	•2	a. LONG TERM AV	G. VALUE	b. NO. OF
NO. (If available)	Required	Believed Present	Believed Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATIO N	(2) MASS	ANALYSES	CONCENTR ATION	b. MASS	(1) CONCENTRATIO N	(2) MASS	ANALYSE
METALS, CYANIDE, A	ND TOTAL	PHENOL	s												
IM. Antimony, Total (7440-36-0)			ж	No Sample	.#.	#	577.)			0	PPM	LBS/DAY	.		
2M. Arsenic, Total (7440-38-2			x	No Sample		-	**	-	23	0	PPM	LBS/DAY	3 4 6	₩	•
3M. Beryllium, Total (7440-41-7)			x	No Sample	2	~		*	4	0	PPM	LBS/DAY	: 	**	-
4M. Cadmium, Total (7440-43-9)			x	No Sample	ž	~	*	₩	#44	0	PPM	LBS/DAY		(800)	-
5M. Chromium, Total (7440-47-3)	х	x		0.009	0.44	0.009	0,37	0.00078	0.01	32	PPM	LBS/DAY	(A)	. 	-
6M. Copper, Total (7440-50-8)			х	No Sample	1	-			#0	0	PPM	LBS/DAY	-	-	_
7M. Lend, Total (7439-92-1)			x	No Sample	125	. 	-	-	-	0	PPM	LBS/DAY	-	*	
8M, Mercury, Total (7439-97-6)			x	No Sample	-	#		-	5 0	0	PPM	LBS/DAY	*		-
9M. Nickel, Total (7440-02-0)			х	No Sample	1. 71	u 		=	2 0.	0	PPM	LBS/DAY	122	150	-
10M. Selenium, Total (7782-49-2)			х	No Sample	.	್ಷಕ	18 0		#	0	РРМ	LBS/DAY		220	-
11M. Silver, Total (7440-22-4			х	No Sample	*	94	725	122	#A.	0	РРМ	LBS/DAY	3 -	184 18	
12M. Thallium, Total (7440-28-0)			x	No Sample	5.62 2	1984	1942	: Table 1	2 20	0	РРМ	LBS/DAY	> -	3=0	-
13M. Zinc, Total (7440-66-6)	x	x		0.144	6.97	0.144	5.88	0.0119	0,15	32	PPM	LBS/DAY	æ	: :	-
14M. Cyanide, Total (57-12-5)			x	No Sample	:39	::=	**	. 	**	0	РРМ	LBS/DAY	g ee	S##	-
SM. Phenols, Total			x	No Sample	.	·	:#1	-	-	0	PPM	LBS/DAY) 	155	***
DIOXIN											157				4
Total DIOXIN 2,3,7,8- Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESUL	TS	No Sample							10.		

CONTINUED FROM PAGE V-3												OUTFALL NO. 2			
	2.	MARK'	X'				FLUENT				4. UNITS (specify if blank)		AKE (option	nal)
1. Pollutant and CAS NO. (If	a. Testing	b Believed	c. Believed	a, MAXIMUM DA	Y VALUE	b, MAXIMUM VALUE (if ava		c, LONG TERM A' (if availab		d. No. OF	a		a. LONG TE VALI		b. NO. OF
available)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA	b, MASS	(I) CONCENTRAT ION	(2) MASS	ANALYSES
GC/MS FRACTION - VOI	LATILE C	OMPOU	NDS												
1V . Accrolein (107-02-8)			x	No Sample	*	28	**	æ	**.	0	РРМ	LBS/DAY	#	79	÷
2V. Acrylonitrile (107-13-1)			х	No Sample		æ				D	PPM	LBS/DAY	3		=
3V. Benzene (71-43-2)			х	No Sample	-	==				0	PPM	LBS/DAY	-	(155	5 2
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			х	No Sample	~	:==	1942	us.	**	0	РРМ	LBS/DAY	-	N##	-
6V, Carbon Tetrachloride (56-23-5)			x	No Sample	(24)	165	122			0	PPM	LBS/DAY	-	9 44	-
7V. Chlorobenzene (108-90-7)			х	No Sample		€.	**	#E	9	0	РРМ	LBS/DAY	-	124	= 1
8V. Chlorodibromomethane (124-48-1)			x	No Sample	i a n	: =	æ	-	·=	0	РРМ	LBS/DAY		. 8 .	5 8
9V. Chloroethane (75-00-3)			x	No Sample	-	1) 🚎	-	-	-	0	PPM	LBS/DAY	=	1441	
10V_2-Chloroethylvinyl Ether (110-75-8)			x	No Sample		0. 11		æ.		0	PPM	LBS/DAY	-	 \	- -
11V. Chloroform (67-66-3)			х	No Sample	1992	:	·	-	-	0	PPM	LBS/DAY	i e	52.5	=
12V. Dichlorobromomethane (75-27-4)			х	No Sample	-	7 2	94 .	-	-	0	PPM	LBS/DAY	: :		-
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			х	No Sample	-	1000	198	(39)	-	0	PPM	LBS/DAY			•
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample	**		o m	æ.	-	0	PPM	LBS/DAY	-		•
16V. 1,1-Dichloroethylene (75-35-4)			х	No Sample	**	121	æ	*	-	0	PPM	LBS/DAY		**	-
17V. 1,2-Dichloropropane (78-87-5)			х	No Sample	·			~	-	0	PPM	LBS/DAY		**:	-
18V_1,3-Dichloropropylene (542-75-6)			×	No Sample			:##	₩.		0	PPM	LBS/DAY		*	
19V. Ethylbenzene (100-41-4)			×	No Sample	2 22	e :				0	PPM	LBS/DAY	5 0		-
20V. Methy! Bromide (74-83-9)			x	No Sample	:=	10 1	:**	-	:::	0	PPM	LBS/DAY	-		-
21V Methyl Chloride (74-87-3)			x	No Sample	*	-		#) **	0	PPM	LBS/DAY	a	₩.	

Chloride (74-87-3) EPA Form 3510-2C (8-90)

CONTINUED FROM PAGE V-												OUTFALL NO. 2			
	2	MARK'	X'				FFLUENT				4. UNITS (s	pecify if blank)		E (optiona	1)
i. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b, MAXIMUM 30 DA (if available		c. LONG TERM AVO available,		d No. OF	L CONCENTRA	b. MASS	a LONG TERM VALUE	I AVG.	b, NO. OF
unimote y	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	0, MASS	(I) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION - VOLATI	LE COMPO	DUNDS(co	ntimued)												
22V. Methylene Chloride (75-09-2)			×	No Sample		- **	##	\text{\tin}\text{\tex{\tex		0	PPM	LBS/DAY	0.80	77	=
23V. 1,1,2,2- Tetrachloroethæne (79-34-5)			x	No Sample	4	*	*	%#		G.	РРМ	LBS/DAY			
24V Tetrachloroethylene (127-18-4)			х	No Sample	1		*	**	-	a	PPM	LBS/DAY			-
25V. Toluene (108-88-3)			x	No Sample	-	æ	144	(14E	-	0	PPM	LBS/DAY		1	-
26V, 1,2-Trans- Dichloroethylene (156-60-5)			х	No Sample	1	o≆.	144	1#	=	ō	РРМ	LBS/DAY	:#	₩.8	-
27V. 1,1,1-Trichloroethane (71-55-6)			×	No Sample	22/	744	-	-	=	0	РРМ	LBS/DAY	-	#6	-
28V 1,1,2-Trichloroethane (79-00-5)			×	No Sample	80	(<u>)=</u>	-	, 		0	РРМ	LBS/DAY	-	a:	-
29V Trichloroethylene (79-01-6)			х	No Sample		0.E	127.1	199	200	0	PPM	LBS/DAY	-	8	-
30V Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V, Vinyl Chloride (75-01-4)			×	No Sample	94V	**	345	-	ber	0	PPM	LBS/DAY	*:	==:	et l
GC/MS FRACTION - ACID CO	MPOUND	S													
1A. 2-Chlorophenol (95-57-8)			x	No Sample	**:		S##	-	355	0	РРМ	LBS/DAY	##	9	
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	••		. 	(1):	200	0	PPM	LBS/DAY	54	=	3 30
3A. 2,4-Dimethy)phenol (105-67-9)			x	No Sample	**		5 <u>4</u>	***		0	PPM	LBS/DAY	-		•
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	44	**	844		••	0	PPM	LBS/DAY			
5A 2,4-Dinitrophenol (51-28-5)			х	Na Sample		#	(Yali	\$\$ 0	922	0	РРМ	LBS/DAY		-	-
6A, 2-Nitrophenol (88-75-5)			х	No Sample	æ	200	19	â.	=======================================	0	PPM	LBS/DAY	4	→	
7A 4-Nitrophenol (100-02-7)			x	No Sample	-	#.	\$ 2		_	0	PPM	LBS/DAY	-	1984	-
BA. P-Chloro-MCresol (59-50-7)			x	No Sample		••	38		*	0	PPM	LBS/DAY	-		
9A. Pentachlorophenol (87-86-5			x	No Sample	-		5. 55	**	*	0	PPM	LBS/DAY	-	=	-
0A. Phenol 108-95-2) 1A. 2,4,6-Trichlorophenol (88-05-2)			x	No Sample		##:	-	70)	.=	0	PPM	LBS/DAY	*	=	
11A 2,4,6-Trichlorophenol (88-05-2)			х	No Sample		= 0		46	-	o	PPM	LBS/DAY	·	136	**

CONTINUED FROM PAGE V-5													OUTFALL NO. 2			
1, Polistant and CAS NO. (If		MARK '	X' c.	a. MAXIMUM DA'	Y VALUE	b. MAXIMUM 30 I (if availab			c. LONG TERM AV		4 No OF	4. UNITS (sp	ecify if blank)	5, INTAL a LONG TERM VALUE		b. NO. OF
available)	a. Testing Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION		LASS ,	(1) CONCENTRATION	(2) MASS	d No OF ANALYSES	CONCENTRATI ON	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NEU	TRAL CON	APOUND:	S											U I		
B. Acenaphthene (83-32-9)			x	No Sample		; 			O ST	-	0	PPM	LBS/DAY	S#	.	
2B. Acenaphtylen (208-96-8))		x	No Sample	æ	5 77			1975	*	0	PPM	LBS/DAY	725	-	
3B Anthracene (120-12-7)			х	No Sample	-	1992		T	:#	199	0	PPM	LBS/DAY	: -		-
4B. Benzidine (92-87-5)			х	No Sample		:#:	*			120	0	PPM	LBS/DAY	1. 	:*:	
5B. Benzo (a) Anthracene (56-55-3)			x	No Sample)E	0	PPM	LBS/DAY	\u	=	-
6B. Benzo (a) Pyrene (50-32-8)			×	No Sample		*			<u></u>	r a	0	PPM	LBS/DAY		*	-
7B. 3,4-Benzofluoranthene (205-99-2)			х	No Sample	n .	3≆	244			*	0	PPM	LBS/DAY		.m	
8B Benzo (ghi) Perylene (191-24-2)			×	No Sample	**	æ	5 111		#		0	PPM	LBS/DAY	ž.	**	
9B. Benzo (k) Fluoranthene (207- 08-9)			x	No Sample	<u>.</u>	-	-		**	14	0	РРМ	LBS/DAY	₩:	::	±5
10B. Bis (2-Chloroethoxy) Methane (111-91-			х	No Sample	227	744	-		##0	-	0	PPM	LBS/DAY	***	-	-
11B. Bis (2-Chloroethyl) Ether (111-44-4)			x	No Sample	± 0);==	-	0.00	**)	s =	0	РРМ	LBS/DAY	1	æ	44
12B Bis (2-Chloroisopropyl) Ether (102-80-1)			х	No Sample	#4	SE SE	-	1		#	0	PPM	LBS/DAY	=	922	-
13B Bis (2-Ethylhexyl) Phthalate (117-81-7)			х	No Sample	= 3	:##	-	9	** :	-	0	PPM	LBS/DAY		2=	-
14B. 4-BromophenylPhenyl Ether (101-55-3)			х	No Sample	**	26	-		₩ :	(#	0	PPM	LBS/DAY	-		**
15B. Butyl Berzyl Phthalate (85- 68-7)			x	No Sample	T.	1.55	77.1		₩.	-	0	PPM	LBS/DAY	e e		
16B. 2-Chloronaphthalene (91-58- 7)			х	No Sample	<u>=</u>	122	200		-	-	0	РРМ	LBS/DAY	99 0	: **	-
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			х	No Sample	*		++7		~	-	0	РРМ	LBS/DAY	=	ie .	-
18B. Chrysene (218-01-9)			х	No Sample	7.		8		#		0	PPM	LBS/DAY	**	-	-
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	3 20	4	**		iak:		0	PPM	LBS/DAY	3.00		ET.
00B 1,2-Dichlorobenzene (95-50-) 21B 1,3-Di-chlorobenzene (541-			x	No Sample	-				-	***	0	РРМ	LBS/DAY	*	=1	-
21B, 1,3-Di-chlorobenzene (541- 73-1)			x	No Sample	#	<u>.</u>			프 *	20	0	PPM	LBS/DAY	=		

CONTINUED	FROM PAGE V-6	
		_ ^

CONTINUED FROM PAGE V-		MADICI	W			2 171	FLUENT					OUTFALL NO 20 pecify if blank)		E (option	al)
		. MARK '	<u> </u>			b. MAXIMUM 30 D		c. LONG TERM AV	G VALUE			pectyy ij brank j	a LONG TERM		
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a, MAXIMUM DAY	VALUE	(if available		(if available		d_No. OF	a. CONCENTRA	b. MASS	VALUE		b. NO. Of
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION	V.,,	(I) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION · BASE/NE	UTRAL C	OMPOUNI	OS (continu	ed)							-				-
22B. 1,4-Dichlorobenzene (106- 46-7)			x	No Sample	240	:(e:	**	**	-	0	РРМ	LBS/DAY		*	*
23B. 1,3-Dichlorobenzidine (91- 24-1)			x	No Sample	***	in .	#3		#%	0	PPM	LBS/DAY	<u> </u>	**	#
24B Diethyl Phthalate (84-66- 2)			x	No Sample	*	7e	27		4	0	РРМ	LBS/DAY		240	
25B. Dimethyl Phthalate (131 - 11-3)			x	No Sample	**	(He	# T	.e.	**	0	PPM	LBS/DAY	#1	#	
26B. Di-N-Butyl Phthalate (84- 74-2)			x	No Sample	**	1/475	ē.	*	#	0	PPM	LBS/DAY	22:		
27B, 2,4-Dinitrotoluene (121- 14-2)			×	No Sample	.TE	-	B Y	0 <u>20</u>		0	РРМ	LBS/DAY	440	: * :	-
28B, 2,6-Dinitrotoluene (606- 20-2)			x	No Sample	<u>e</u>	2	-1	2 4		0	РРМ	LBS/DAY	**	; •• 0	**
29B, Di-N-Octyl Phthalate (117- 84-0)			х	No Sample	**	-	-	1996	-	0	РРМ	LBS/DAY	##J	2556	
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			x	No Sample	(m)	-		T less	-	0	PPM	LBS/DAY		3	
31B. Fluoranthene (206-44-0)			×	No Sample		22	₩:	4	**	0	PPM	LBS/DAY	**.	3#F	:±4
32B. Fluorene (86-73-7)			x	No Sample		<u> </u>	-		22	0	PPM	LBS/DAY	-	*	-
33B. Hexachlorobenzene (118- 74-1)			x	No Sample	1774	75/	. Bi		122	0	PPM	LBS/DAY	2	:#	-
34B. Hexachlorobutadiene (87- 68-3)			х	No Sample	***	-	*	-	. 	0	PPM	LBS/DAY	*	%	
35B. Hexachlorocyclopentadiene (77- 47-4)			x	No Sample	i ss i	-	æ	==	-	0	PPM	LBS/DAY	- Tan	8 <u>8</u>	
36B Hexachloroethane (67-72-			х	No Sample		-		-	15	0	PPM	LBS/DAY	·	1048	
37B Indeno (1,2,3-cd) Pyrene (193-39-5)			ж	No Sample		-	0440	-	æ	0	PPM	LBS/DAY		Œ	
18B. Isopharone (78-59-1)			×	No Sample		9		#4	2.	0	PPM	LBS/DAY		100	
398 Naphthalene (91-20-3)			×	No Sample	189	553		at (-	0	PPM	LBS/DAY	:¥•	14	-
40B. Nitrobenzene (98-95-3)			х	No Sample	340	₩.	-	**	255	0	PPM	LBS/DAY	1570	# _	-
41B. N-Nitrosodimethylamine (62-75-9)			x	No Sample	=	-		*	(E	0	РРМ	LBS/DAY	•	-	-
42B. N-Nitrosodi• N- Propylamine (621-64-7)			х	No Sample	: 	-		*		0	PPM	LBS/DAY	(a)	=	

CONTINUED FROM PAGE	V-7	_										OUTFALL NO. 2			
	2	MARK	'X'				FLUENT				4. UNITS (s	pecify if blank)		Œ (option	ıl)
Pollutant and CAS NO. (If available)	a. Testing	b Believed	c. Believed	a, MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D. (if available		c. LONG TERM AV (if availabl		d. No. OF	a CONCENTRA	b. MASS	a. LONG TERM VALUE		b NO OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/	NEUTRA	L COMPO	UNDS (cor	ntinued)											
43B. N- Nitrosodiphenylamine (86-30-6)			x	No Sample	**		o +	-		0	PPM	LBS/DAY		***	-
44B. Phenanthrene (85-01-8)			х	No Sample	*	_	-	*	20	0	PPM	LBS/DAY	-	*	
436. Pytelle (129-00-0			x	No Sample		2 44	: **			0	PPM	LBS/DAY	-51	無り	-
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	***	A35	-	*		0	PPM	LBS/DAY	*	3	
GS/MS FRACTION - PESTI	CIDES														
IP. Aldrin (309-00-2)			x	No Sample	•	=	#3	=	2	0	PPM	LBS/DAY		#	-
2P α-BHC (319-84-6)			x	No Sample	125	-	<u> 44</u> 0	-	-	0	PPM	LBS/DAY	æ	**	
3P, β-BHC (319-85-7)			х	No Sample	**.	÷	78 0	-		0	PPM	LBS/DAY	-	55.0	-
4P. γ-BHC (58-89-9)			х	No Sample	#	-	==		-	0	PPM	LBS/DAY	1722	225	
5P. 8-BHC (319-86-8)			х	No Sample	2	<u>2</u> 0	-	**	225	0	PPM	LBS/DAY		**:	-
6P. Chlordane (57-74-9)			х	No Sample			_	=	-	0	РРМ	LBS/DAY		Service (
7P. 4,4'-DDT (50-29-3)			х	No Sample	-	-		#	-	0	PPM	LBS/DAY	ia.	1995	
8P. 4,4'-DDE (72-55-9)			х	No Sample				-	-	0	PPM	LBS/DAY	-	*	
9P. 4,4'-DDD (72-54-8)			х	No Sample		#:		· *	-	0	PPM	LBS/DAY		**	£ 5
10P. Dieldrin (60-57-1)			x	No Sample	-	117/		-	9	0	PPM	LBS/DAY	-	-	
11P. a-Enosulfan (115-29-7)			х	No Sample		-		-	-	0	PPM	LBS/DAY	***	æ	-
12P. β-Endosulfan (115-29-7)			x	No Sample	-			·		0	PPM	LBS/DAY	-	. <u></u>	-
13P, Endosulfan Sulfate (1031-07-8)			x	No Sample	-	-	-	-	-	0	PPM	LBS/DAY	-	-	-
14P. Endrin (72-20-8			х	No Sample	-		-	-		0	PPM	LBS/DAY		-	-
Aldehyde (7421-93-4)			х	No Sample	*	-	**	**	···	0	PPM	LBS/DAY	=	-	
16P. Heptachlor (76-44-8			х	No Sample	125) -		is:	* .	0	PPM	LBS/DAY	-		

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

CONTINUED FROM PAGE V-8

CONTINUED FROM	M PAGE Y	/-8													
	2	MARK	'X'			3. Ē	FFLUENT				4. UNITS (5)	pecify if blank)	5. INTAI	Œ (optiona	1)
å	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DAY available)	•	c. LONG TERM AV		d No OF	8. CONCENTRA	b. MASS	a LONG TERM AV	100710000	B. NO. OF
available)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSE
S/MS FRACTION	- PESTIC	IDES (con	timued)												
7P. Heptachlor Epoxide 1024-57-3)			х	No Sample		-	••	=	F##	0	PPM	LBS/DAY	::	**	
8P. PCB-1242 53469-21-9)			x	No Sample	=	**	*	-		0	РРМ	LBS/DAY		2 0	, ,
9P. PCB-1254 11097-69-1)			х	No Sample		**(-		3	0	РРМ	LBS/DAY	-	24.	-
20P. PCB-1221 11104-28-2)			х	No Sample	20	41	-			0	РРМ	LB\$/DAY	-	***	_
1P. PCB-1232 11131-16-5)			к	No Sample	**	#0:	-	=		0	PPM	LBS/DAY	7. - 8	-	=:
2P. PCB-1248 12672-29-6)			х	No Sample	==	-	-	-	-	0	РРМ	LBS/DAY		40	-
3P, PCB-1260 11096-82-5)			х	No Sample	-		-	<u> </u>	1744	0	РРМ	LBS/DAY	-	*	-
4P. PCB-1016 12674-11-2)			x	No Sample	-	-	÷	=	-	0	РРМ	LBS/DAY	-	*	-
25P, Toxaphene (8001-35-2)			x	No Sample	-	-	i=.	-	_	0	РРМ	LBS/DAY	-		

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Page V-9

SEE INSTRUCTIONS.

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUE	NT				3. UNITS (specif	y if blank)	4. INTA	KE (options	2/)
1. Pollutant	a, MA	XIMUM DAY VALUI	3	b. MAXIMUM 30 DAY available		c. LONG TERM AV (if availal		d. No. OF	a CONCENTRATION	b. MASS	a. LONG TERM AV	G. VALUE	b. NO. OF
		(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES			(1) CONCENTRATION	(2) MASS	ANALYSE
Biological Oxyge	en Demand (BOD)	No Sample	·=	-		e=	2 73 11	0	РРМ	LBS/DAY	=	-	
Chemical Oxyge	n Demand (COD)	No Sample		-	差	-	••	0	PPM	LBS/DAY		-	
Total Organic Ca	rbon (TOC)	No Sample	-	-	*	*	2	0	PPM	LBS/DAY	°	=	
i. Total Suspended	Solids (TSS)	No Sample	7.84	-	••			0	PPM	LBS/DAY		**	e.C
. Ammonia (as N)		No Sample	124	-	22		**	0	PPM	LBS/DAY	-	**	-
. Flow		VALUE 1.8		VALUE		VALUE 0.91		35	MGD	2 ***	VALUE -	***************************************	••
g. Temperature (wi	nter)	VALUÉ No Sam	ple	VALUE		VALUE		0	°C		VALUE -		-
n, Temperature (su	mmer)	VALUE No Sam	ple	VALUE		VALUE		0	°C		VALUE 		=
. pH		6.08	8.32	!	••	A STATE OF S		35	STANDARI	UNITS		Similar H.I.	

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. 1	EFFLUENT				4. UNITS (specif.	y if blank)	5. INTA	KE (optiona	1)
I. Pollutant and CAS NO. (If	b.	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA available		c. LONG TERM AV		d. No. OF	GOVERN TRANS	1 MICC	aL LONG TERM AV	G. VALUE	b. NO. OF
available)	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b, MASS	(1) CONCENTRATION	(2) MASS	ANALYSE
a. Bromide (24959-67-9)		х	No Sample		5	**	72	#)	0	PPM	LBS/DAY	<u> </u>	844	
b. Chlorine, Total Residual		х	No Sample		3			<u>a</u> :	0	PPM	LB\$/DAY	*	(H)	-
c. Color		x	No Sample	144).	De .	847	=	=	0	NTU	-		5 55 2	-
d. Fecal Coliform		х	No Sample	Harris .	**	() ** **()		-	0	COL/100ml		#1 	1550	÷
. Fluoride 16984-48-8)		x	No Sample		: ##	>#×	=	-	0	PPM	LBS/DAY	•	*	
Nitrate - Nitrite		x	No Sample		iati	(=)		∞	0	PPM	LBS/DAY			-

EPA Form 3510-2C (8-90)

TEM V-B CONTINUE	D										OUTFALL NO	. 202		
		RK 'X'			3. I	EFFLUEN	Γ			4. UNITS (sp	pecify if blank)	5. INT	AKE (option	al)
1. Pollutant and CAS NO. (If available)	a Believed	b. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 Da (if available		c. LONG TERM A		d. No. OF ANALYSES	a. CONCENTRA	b. MASS	a LONG TERM A	VG VALUE	b. NO. OF
	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALYSI
C/MS FRACTION														
. Nitrogen, Total Organic (as N)		x	No Sample		-		40	144	0	РРМ	LBS/DAY	-		
. Oil & Grease		x	No Sample		-	==	_		0	PPM	LBS/DAY			ļ <u>.</u>
Phosphorus (as P), Total (7723-14-0)		x	No Sample		-		S=4,		0	РРМ	LBS/DAY	-		_
. Radioactivity														
1) Alpha		x	No Sample				2 44		0	pCi/L		-		
2) Beta		x	No Sample	-			5 <u>2</u>		0	pCi/L	-		-	
3) Radium, Total		x	No Sample				-	**	0	pCi/L	22			<u>.</u>
4) Radium 226, Total		x	No Sample		-	-			0	pCi/L			•	
. Sulfate (as SO 4) 14808-79-8)		×	No Sample					44	0	PPM	LBS/DAY	·=	·	-
. Sulfide (as S)		х	No Sample		-				0	PPM	LBS/DAY	<u> </u>	2	-
n, Sulfite (as SO ₃) 14265-45-3)		x	No Sample		**	-	Net•		0	PPM	LBS/DAY			
n. Surfacants		x	No Sample		744	_	2-		0	PPM	LBS/DAY	-	(**)	
o. Aluminum, Total 7429-90-5)		x	No Sample	ļ					0	PPM	LBS/DAY	~		
. Barium Total 7440-39-3)		x	No Sample	o = =	-		· · ·		0	PPM	LBS/DAY	-		•••
Boron, Total (7440- 2-8)		x	No Sample						0	PPM	LBS/DAY		2000	
Cobalt, Total (7440- 8-4)		х	No Sample		-		_		0	PPM	LBS/DAY			-
. Iron, Total (7439- 9-6)		x	No Sample	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 				0	PPM	LBS/DAY			-
Magnesium, otal (7439-95-4)		x	No Sample		-	-		_	0	PPM	LBS/DAY			_
Molybdenum, otal (7439-98-7)		x	No Sample	-	-				0	PPM	LBS/DAY	_0#	T	
. Manganese, otal (7439-96-5)		x	No Sample	_	135		-		0	PPM	LBS/DAY	194	040	_
			1	1								1		1

0

0

PPM

PPM

LBS/DAY

LBS/DAY

w. Tin, Total (7440-031-5) x. Titanium, Total (7440-32-6)

No Sample

No Sample

Ì	EPA I.D. NUMBER (cop	py from Item I	of Form 1)	110000340774	OUTFALL NO. 202

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 pph or greater. If you mark column 2b for acrolein, acrylonistrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 pph or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

additional details and re	qurement	<u> </u>			-								_		
Part C.		NADE	,			3 17	FFLUENT				A 1	INITS	5 INT	KE (optiona	1)
1. Pollutant and CAS		2. MARK 'Z b.	С.	a. MAXIMUM DA	Y VALUE	b MAXIMUM 30 D. availabl	AY VALUE (if	c. LONG TERM AV		d No OF	a.	MIIS	a. LONG TERM AV		b NO. OF
NO. (If available)	a. Testing Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATIO N	(2) MASS	ANALYSES	CONCENTR ATION	b. MASS	(1) CONCENTRATIO N	(2) MASS	ANALYSES
METALS, CYANIDE, A	ND TOTAL	PHENOL	S												
1M. Antimony, Total (7440-36-0)			x	No Sample	=		**	#8		0	РРМ	LBS/DAY	-	~	4
2M. Arsenic, Total (7440-38-2			х	No Sample	4	*	E EES	(- =1	-	0	PPM	LBS/DAY		::=	-
3M. Beryllium, Total (7440-41-7)			х	No Sample	5 4 67	34C	***	-	3#K	0	РРМ	LBS/DAY	-	1.00	-
4M. Cadmium, Total (7440-43-9)			х	No Sample	:ex:	**			3	0	PPM	LBS/DAY	***	755	T7"
5M. Chromium, Total (7440-47-3)	X.	x		0,006	0.09	0.006	0.09	0,0006	0,0046	32	PPM	LBS/DAY		#	-
6M. Copper, Total (7440-50-8)			x	No Sample		i#5	*	**	<u>u</u> €	0	РРМ	LBS/DAY	*	EV.	-
7M. Lead, Total (7439-92-1)			x	No Sample	F#3	-	***	=)#	0	PPM	LBS/DAY		= :	
8M, Mercury, Total (7439-97-6)			x	No Sample	**************************************	570.	*	£	·#	0	PPM	LBS/DAY	14.2	40	#0.
9M. Nickel, Total (7440-02-0)			х	No Sample	38		*	<u>1</u> 20	n <u>e</u>	0	PPM	LBS/DAY	gas:	247)	-
10M. Selenium, Total (7782-49-2)			х	No Sample		·		~	-	0	РРМ	LBS/DAY		***	-
11M. Silver, Total (7440-22-4			x	No Sample	144	34	-			0	PPM	LBS/DAY	Sec	#5	
12M. Thallium, Total (7440-28-0)			x	No Sample	æ	-		••	1 	0	РРМ	LBS/DAY		# 6	
13M. Zinc, Total (7440-66-6)	x	x		0.05	0.75	0.05	0.75	0.0014	0,01	32	РРМ	LBS/DAY			-
14M. Cyanide, Total (57-12-5)			x	No Sample	S71			.=:	=0	0	PPM	LBS/DAY			-
15M. Phenols, Total			x	No Sample	<u></u>		*			0	РРМ	LBS/DAY	2	**	-
DIOXIN				A 5											
DIOXIN 2,3,7,8- Tetrachlorodibenzo-P Dioxin (1764-01-6)	+		x	DESCRIBE RESUL	TS	No Sample	78			©.	3				

CONTINUED FROM PAGE V-3												OUTFALL NO. 2			
		MARK'	X'			3. EI	FLUENT				4. UNITS (s	pecify if blank)	5. INT	AKE (optio	mal)
1. Pollutant and CAS NO. (If	a. Testing	h Religyed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM : VALUE (if ava		c. LONG TERM A		d No. OF	a .		a. LONG TE VAL		b. NO. OF
available)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALYSES
GC/MS FRACTION - VOI	LATILE C	OMPOU	NDS												
1V, Accrolein (107-02-8)			х	No Sample	9 <u>4</u> 4	124	-	# 3	-	0	PPM	LBS/DAY		-	••
2V. Acrylonitrile (107-13-1)			x	No Sample	-		-	•	=	0	PPM	LBS/DAY	-	:: :	•
3V. Benzene (71-43-2)			x	No Sample	*	*	•	20	-	0	PPM	LBS/DAY	φ	: E	-
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bramoform (75-25-2)			x	No Sample	3 4 8	: 	=	#s	-	0	РРМ	LBS/DAY	æ .	æ	- 🥊
6V. Carbon Tetrachloride (56-23-5)			х	No Sample		*	i ii	-	-	0	РРМ	LBS/DAY	1.554	্বত	=
7V, Chlorobenzene (108-90-7)			х	No Sample	F-4-5		***	~	·-	0	PPM	LBS/DAY	:=:	-	, T.
8V. Chlorodibromomethane (124-48-1)			х	No Sample	8		*	=:	-	0	РРМ	LBS/DAY			
9V. Chloroethane (75-00-3)			х	No Sample		¥	=	-	-	0	РРМ	LBS/DAY	-	***	
10V, 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample	*		: 4	**	-	0	PPM	LBS/DAY	ेस र		
11V. Chloroform (67-66-3)			x	No Sample	3	æ	122	4 .	-	0	РРМ	LBS/DAY	:=	H2	
12V. Dichlorobromomethane (75-27-4)			x	No Sample		, U st	i		-	0	РРМ	LBS/DAY	-		
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			x	No Sample	9		*	20	@ <u></u>	0	PPM	LBS/DAY	:ee	-	
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample		-	**		-	0	PPM	LBS/DAY		=:	-
16V.1,1-Dichloroethylene (75-35-4)			x	No Sample	:ee		·**	=	1 4	0	PPM	LBS/DAY		-	-
17V. 1,2-Dichloropropane (78-87-5)			x	No Sample		=======================================		22		0	PPM	LBS/DAY		-	-
18V. 1,3-Dichloropropylene (542-75-6)			x	No Sample	沒	-	022	**	164	0	PPM	LBS/DAY	**	** 2	-
19V Ethylbenzene (100-41-4)			x	No Sample			-		10#	0	PPM	LBS/DAY	75	250	74
20V. Methyl Bramide (74-83-9)			×	No Sample	THE .	-	222	(a4)		0	PPM	LBS/DAY	-	-	-
21V. Methyl Chloride (74-87-3)			×	No Sample	**	-		(19)		0	PPM	LBS/DAY		**	-

CONTINUED FROM PAGE V-4												OUTFALL NO. 20		(D.)	
	2	MARK'	X				FFLUENT	r			4. UNITS (s	pecify if blank)		E (optiona	1
1 Pollutant and CAS NO. (If	a. Testing	b.	5:: Duli1	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA (if available		c. LONG TERM AVO available		d. No. OF	a. CONCENTRA	L WASS	a. LONG TERM VALUE		b NO. OF
avaitable)	Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
GC/MS FRACTION - VOLATIL	E COMPO)UNDS/00	ntinued)												
22V. Methylene Chloride (75-09-2)			x	No Sample	20	4	**	2 01	240	0	РРМ	LBS/DAY	-	5 4 43	
3V 1,1,2,2- Tetrachloroethane 79-34-5)			x	No Sample	##	/15	38	##.5	125	0	РРМ	LBS/DAY		50 	
4V Tetrachloroethylene 127-18-4)			x	No Sample	*	#	.	#	**	0	РРМ	LBS/DAY	2	(22)	
25V Toluene 108-88-3)			х	No Sample	## i		::::	## E	-	0	PPM	LBS/DAY	5 5		-
26V. 1,2-Trans- Dichloroethylene 156-60-5)			x	No Sample	÷.	=	35	₩	••	0	РРМ	LBS/DAY	The state of the s	4	
27V 1,1,1-Trichloroethane 71-55-6)			х	No Sample	æs		S e €	#2	: :	0	РРМ	LBS/DAY	*	ero.	-
8V. 1.1,2-Trichloroethane 79-00-5)			x	No Sample	æ.	÷	inee.	**:		0	PPM	LBS/DAY	æ.		•
9V Trichloroethylene 79-01-6)			×	No Sample	-		3 94		-	0	PPM	LBS/DAY		-	-
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
BIV. Vinyl Chloride (75-01-4)			×	No Sample	#	#"	V22	4	- <u> </u>	0	PPM	LBS/DAY	-	: -	
C/MS FRACTION - ACID CO	MPOUND	s													
A. 2-Chlorophenol 95-57-8)			x	No Sample	20	20	122		124	0	PPM	LBS/DAY	3 46 3	æ.,	-
2A. 2,4•Dichlorophenol 120-83-2)			x	No Sample	<u>~</u>	<u> </u>	- 4	1	**	0	РРМ	LBS/DAY			-
A. 2,4-Dimethylphenol 105-67-9)			х	No Sample	3	#(# #	*		0	PPM	LBS/DAY	*	844	-
A. 4,6-Dinitro-OCresol 534-52-1)			×	No Sample		-	=		Œ	0	PPM	LBS/DAY	u .	122	-
iA. 2,4-Dinitrophenol 51-28-5)			х	No Sample	:**	#.C	W.		(J	0	PPM	LBS/DAY	==	122	-
iA. 2-Nitrophenol 88-75-5)			х	No Sample	:e:	-	-		1.31	0	PPM	LBS/DAY		4	-
A. 4-Nitrophenol 100-02-7)			x	No Sample		-			5 75	э	РРМ	LB\$/DAY	-57	-	•
A. P-Chloro-MCresol 59-50-7)			х	No Sample		*	** *			0	PPM	LBS/DAY		-	-
A. Pentachlorophenol 87-86-5			х	No Sample	i #)	=:		-		0	PPM	LBS/DAY	(me		-
0A. Phenol 108-95-2)			x	No Sample	SEE:	H	**:		**	0	PPM	LBS/DAY	N#	## C	
1A. 2,4,6-Trichlorophenol 88-05-2)			x	No Sample	275				-	0	PPM	LBS/DAY	144	200	22

CONTINUED FROM PAGE V-5												OUTFALL NO 2		m	
	2.	MARK	Χ'				. EFFLUENT				4. UNITS (sp	ecify if blank)		KE (optiona	u)
1. Polluzzar and CAS NO. (If available)	a. Testing Required	b. Believed	c. Believed	a, MAXIMUM DA		b. MAXIMUM 30 I (if availab		c. LONG TERM AV	le)	d. No. OF ANALYSES	E. CONCENTRATI	b. MASS	a LONG TERM VALUE		b. NO. OF
ļ.	кефшеа	Present	Absent	(1) CONCENTRATION	(2) MASS	(l) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALISES	ON		(1) CONCENTRATION	(Z) MASS	1
S/MS FRACTION - BASE/NEU	TRAL CON	APOUND	S												
B Acenaphthene (83-32-9)			×	No Sample				·		0	РРМ	LBS/DAY		**	=
B. Acenaphtylen (208-96-8)			×	No Sample	2	24	-	1.524	*	0	PPM	LBS/DAY	-	-	••
BB. Anthracene (120-12-7)			x	No Sample	-	: - -:	Sept.		-	0	PPM	LBS/DAY	-	-	_
B Benzidine (92-87-5)			x	No Sample	-			-	-	0	PPM	LBS/DAY	<u></u>		-
B. Benzo (a) Anthracene 56-55-3)			x	No Sample		**	2	- 44	-	0	PPM	LBS/DAY		-	-
5B. Benzo (a) Pyrene (50-32-8)			x	No Sample		-	:#	-	-	o	РРМ	LBS/DAY	-	***	-
7B. 3,4-Benzofluoranthene 205-99-2)			x	No Sample	<u></u>	S#1	UT.	-	*	0	РРМ	LBS/DAY	Ψ.	152	
BB. Beruzo (ghi) Perylene (191-24-2)			x	No Sample	=		-	24	eu	0	PPM	LBS/DAY		: **	-
PB. Benzo (k) Fluoranthene (207- 08-9)			x	No Sample			700	₩ :	:	0	PPM	LB\$/DAY	+7		
10B. Bis (2-Chloroethoxy) Methane (111-91-			x	No Sample	-	200	-		3 45	0	PPM	LBS/DAY		<u>#</u>	-
1) 11B, Bis (2-Chloroethyl) Ether [111-44-4)			x	No Sample			124	e)	2	0	PPM	LBS/DAY	_		
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	423	:#	34	H H 1	V	D	PPM	LBS/DAY		(0.00)	-
13B. Bis (2-Ethylhexyl) Phthalate [117-81-7]			x	No Sample	-	:#6	-	-		0	PPM	LBS/DAY	-		
14B, 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	-	(155				0	PPM	LBS/DAY	-	22	
ISB. Butyl Benzyl Phthalate (85- 68-7)			x	No Sample	_ 147	1722	-		\a_	0	PPM	LBS/DAY	*		-
16B. 2-Chloronaphthalene (91-58-			x	No Sample	-	-	-			0	PPM	LBS/DAY	#X	#	-
17B, 4-Chlorophenyl Phenyl Ether (7005-72-3)			х	No Sample	**	0.00	-	÷	4	0	PPM	LBS/DAY	**		-
18B Chrysene (218-01-9)			x	No Sample	<u>~</u>	tsa:	#11	#	i w	0	РРМ	LBS/DAY			-
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	# 1		-	 -	-	0	РРМ	LBS/DAY	j+.	₩\ ₩\	
0B. 1,2-Dichlorobenzene (95-50-) 1B. 1,3-Di-chlorobenzene (541-			×	No Sample	æ	(#	*		21	a	PPM	LBS/DAY	-		-
21B, 1,3-Di-chlorobenzene (541- 73-1)			x	No Sample	_	# #		-	-	0	PPM	LBS/DAY	-	-	er 1

CONTINUED FROM PAGE V-												OUTFALL NO 2			
	2	. MARK	X				FFLUENT				4. UNITS (4	pecify if blank)	·	KE (option	al)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D (if availab	le)	c. LONG TERM AV (if availabl	(e)	d. No. OF	a. CONCENTRA	b. MASS	a, LONG TERM VALUE		b. NO. OF
·	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE/NE	UTRAL C	OMPOUN	DS (continu	red)											
22B. 1,4-Dichlorobenzene (106- 46-7)			x	No Sample	744		52E	46	-	0	PPM	LBS/DAY	144	22	
23B. 3,3-Dichlorobenzidine (91» 94-1)			x	No Sample	(inc	940			ine.	0	PPM	LBS/DAY	-	••	
24B, Diethyl Phthalate (84-66- 2)			×	No Sample	1200	=		#s		0	PPM	LBS/DAY	**		
25B, Dimethyl Phthalate (131 - 11-3)			х	No Sample	(4	:#:	*	¥=	::	0	PPM	LBS/DAY	-		-
26B. Di-N-Butyl Phthalate (84- 74-2)			×	No Sample	59K	(**)	·**	-		0	PPM	LBS/DAY	e		
27B, 2,4-Dinitrotoluene (121- 14-2)			х	No Sample		·#:	: : :	*		0	PPM	LBS/DAY		#	-
28B 2,6-Dinitrotoluene (606- 20-2)			x	No Sample		##a	-		1275	0	PPM	LBS/DAY	-	æ	ê
29B. Di-N-Octyl Phthalate (117- 84-0)			x	No Sample	-22		~	Δ.	722	0	PPM	LBS/DAY	544		-
30B_1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			x	No Sample		-	-	*	:++	0	PPM	LB\$/DAY	**		
31B. Fluoranthene (206-44-0)			х	No Sample		£		55.		0	PPM	LBS/DAY		<u>=</u> 1	a
32B, Fluorene (86-73-7)			x	No Sample			-	-	A**	0	PPM	LBS/DAY	4	3	-
13B. Hexachlorobenzene (118- 74-1)			x	No Sample	-	7#E		: * :	100	0	PPM	LBS/DAY	25.	. ==	-
34B. Hexachlorobutadiene (87- 68-3)			×	No Sample	a.	(\$4)	5			0	РРМ	LBS/DAY	0 94	æ	
35B. Hexachlorocyclopentadiene (77- 47-4)			x	No Sample		···	*		les .	0	PPM	LBS/DAY	nee .	=	-
36B Hexachloroethane (67-72-1)			×	No Sample		-		-		0	PPM	LBS/DAY	2.00	-	
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			×	No Sample	-	12	222			0	PPM	LBS/DAY	Zi••	-	-
38B. Isophorone (78-59-1)			x	No Sample				-		0	PPM	LBS/DAY	4	-	#
39B. Naphthalene (91-20-3)			х	No Sample	-	æ				0	РРМ	LBS/DAY		-	
40B. Nitrobenzene (98-95-3)			x	No Sample	-	- SAF	-	-		0	PPM	LBS/DAY	-		-
41B. N-Nitrosodimethylamine (62-75-9)			×	No Sample	*		S=	:••:		0	PPM	LBS/DAY	-	-	-
42B. N-Nitrosodi- N- Propylamine (621-64-7)			х	No Sample			-	-	-	0	PPM	LBS/DAY	-		-

CONTINUED FROM PAGE												OUTFALL NO. 2			
	2	. MARK	'X'			3, EI	FLUENT				4. UNITS (s	specify if blank)	5. INTA	E (option	al)
l Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA		(if available	e)	c. LONG TERM AV (if availabl	e)	d, No. OF	2 CONCENTRA	b. MASS	a. LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSES
GS/MS FRACTION - BASE	NEUTRA	L COMPO	UNDS (cor	ntinued)									,		
43B. N- Nitrosodiphenylamine (86-30-6)			x	No Sample	220	7 2-		-	**	0	PPM	LBS/DAY	See:	1000	•
44B. Phenanthrene 85-01-8)			x	No Sample	*		IB	*	£	0	PPM	LBS/DAY		-	-
138. Pyrent (129-00-0			x	No Sample	-	-	**	••		0	PPM	LBS/DAY		i e	-
46B 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	. .	() **		**:	-	D	PPM	LBS/DAY		-	-
GS/MS FRACTION - PEST	ICIDES														- Q
1P. Aldrin (309-00-2)			x	No Sample	÷.	-	-		*	0	PPM	LBS/DAY		27	
2P, α-BHC (319-84-6)			x	No Sample	-	// <u>-</u>	DEC	•	*	0	PPM	LBS/DAY	:44	#3	
3P. β-BHC (319-85-7)			x	No Sample	**		14 01	**	*	0	PPM	LBS/DAY	-	••	
4Р. ₇ -ВНС (58-89-9)			x	No Sample		18	 .:	-	**	0	PPM	LBS/DAY		2	•
5P. &-BHC (319-86-8)			x+	No Sample	••	<u>*</u>	-		*	0	PPM	LBS/DAY		#27 #20	-
6P. Chlordane (57-74-9)			x	No Sample	<u> </u>	÷.	-	•		0	PPM	LBS/DAY	-	1 200	
7P. 4,4'-DDT (50-29-3)			х	No Sample	**		37 /2	**	<i>5</i> 0	0	PPM	LBS/DAY	#	-	ļ.
BP. 4,4'-DDE (72-55-9)			x	No Sample		a	#8	2	•	0	PPM	LBS/DAY	X 44	***	-
9P_4,4`-DDD (72-54-8)			x	No Sample	**	**):		1948 (-	0	PPM	LBS/DAY	ine.	 5	
10P. Dieldrin (60-57-1)			х	No Sample		-				0	PPM	LBS/DAY		3	-
11P. α-Enosulfan (115-29-7)			x	No Sample		#	-	*	-	0	PPM	LBS/DAY	~	240	
12P, β-Endosulfan (115-29-7)			x	No Sample	400	4 0	-	*	**	0	РРМ	LBS/DAY	3 4	**	•
3P. Endosulfan Sulfate 1031-07-8)			x	No Sample				(#*)	-	0	PPM	LBS/DAY	√ <u>#</u>	**	-
14P. Endrin (72-20-8			х	No Sample		-	9.	=	-	0	PPM	LBS/DAY	-	•••	-
Aldehyde (7421-93-4)			х	No Sample		-				0	PPM	LBS/DAY	-		-
16P. Heptachlor (76-44-8			х	No Sample	940			275		0	PPM	LBS/DAY		••	~

CONTINUED FROM PAGE V-8

EPA LD_NUMBER (copy from Item 1 of Form 1) 110000340774

CUNTINUEDTRO				·											
	2	. MARK	'X'			3. E	FFLUENT				4. UNITS (s)	pecify if blank)	5. INTA	KE (optiona	ul)
1. Pollutant and CAS NO. (If available)	a Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DAY available)		c. LONG TERM AV		d. No. OF	a. CONCENTRA	b. MASS	a LONG TERM AV	G. VALUE	D. NO. OF
avanable)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
JS/MS FRACTION	- PESTIC	IDES (con	imued)												
17P, Heptachlor Epoxide (1024-57-3)			х	No Sample	Ħ		3/2	-	=	0	PPM	LBS/DAY	-	:**:	
18P. PCB-1242 (53469-21-9)			х	No Sample	14		ië.	19	=	0	PPM	LBS/DAY	=	22	
19P. PCB-1254 (11097-69-1)		13111	x	No Sample	? 	-	\ 		-	0	PPM	LBS/DAY	=		_
20P. PCB-1221 (11104-28-2)			×	No Sample	: ##	=	\##	-		0	PPM	LBS/DAY	-	***	-
21P, PCB-1232 [11131-16-5]			x	No Sample				-	***	0	РРМ	LBS/DAY	55 .		-
22P. PCB-1248 (12672-29-6)			х	No Sample	14	**	S44	_		0	РРМ	LBS/DAY	==	120	-
23P. PCB-1260 (11096-82-5)			×	No Sample	-		34	-		0	PPM	LBS/DAY	-	*	-
24P. PCB-1016 12674-11-2)			x	No Sample	NTD:		=	-	310	0	РРМ	LBS/DAY		: ** :	-
25P. Toxaphene (8001-35-2)		- 0.32	х	No Sample	-	=	562	-		0	PPM	LBS/DAY	#	*	ē.

EPA Form 3510-2C (8-90)

Page V-9

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

SEE INSTRUCTIONS.

V INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO. 501

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUE	NT				3. UNITS (specif	fy if blank)	4. INTA	KE (optiona	1)
1. Pollutant	a. MA	AXIMUM DAY VALUE		b. MAXIMUM 30 DAY available		c. LONG TERM A' (if availal		d. No. OF	a CONCENTRATION	b. MASS	a. LONG TERM AV	G VALUE	b. NO. OF
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	a concentration	U. MANUS	(1) CONCENTRATION	(2) MASS	ANALYSE
ı, Biological Oxyg	en Demand (BOD)	No Sample	-	==	er.	-	3 41	0	PPM	LBS/DAY	-	540	=:
o. Chemical Oxyge	en Demand (COD)	No Sample		-		*	æ	0	РРМ	LBS/DAY	=	¥	-
. Total Organic Ca	arbon (TOC)	No Sample	28	3	£	±	•	0	PPM	LB\$/DAY		*	-
d. Total Suspended	Solids (TSS)	6.8	67.49	6.8	67.49	2.25	19.46	4	PPM	LBS/DAY	588	₩	
2. Ammonia <i>(as N)</i>		No Sample	122	-	*	a	=	0	PPM	LBS/DAY	220	92%	220
. Flow		VALUE		VALUE		VALUE 1.037		4	MGD		VALUE		
g. Temperature (wi	inter)	VALUE No Samp	ole	VALUE		VALUE -		0	°C		VALUE 		
Temperature (su	mmer)	VALUE No Samp	ote	VALUE		VALUE -		0	℃		VALUE 		
i. pH		No Sample	No Sample	(4)	-		(Agapte	0	STANDARI	UNITS	57,21304-1	建 量	

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall, See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. 1	EFFLUENT				4. UNITS (speci)	fy if blank)	5. INTA	KE (optiona	d) (
1. Pollutant and CAS NO (If	ь,	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA available		c. LONG TERM AV	,	d. No. OF	GOLIGGIEN AND	1	a LONG TERM AV	G. VALUE	b. NO. OF
available)	Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)		x	No Sample			**	38	*	0	PPM	LBS/DAY	122	3:	-
b. Chlorine, Total Residual		х	No Sample			8448	-	322	0	РРМ	LBS/DAY	·	: == 5	**:
c, Color		х	No Sample	140	**	***	·	6-8	0	NTU		-		
d. Fecal Coliform		x	No Sample	**	-	***	Set 1	S 11 1.	0	COL/100ml	557	**	=	-
e, Fluoride (16984-48-8)		х	No Sample		型	## E	â.	11551	0	PPM	LBS/DAY	æ	E	
f. Nitrate - Nitrite (as N)		x	No Sample	·22		44	Œ	(#	0	PPM	LBS/DAY	N-L	-	

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

SEE INSTRUCTIONS.

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO. 501

PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

				2. EFFLUE	NT				3. UNITS (specif	y if blank)	4. INTA	KE (options	al)
1. Pollutant	a. M.A	XIMUM DAY VALUE	: :	b. MAXIMUM 30 DAY available		c. LONG TERM AV (if availal		d. No. OF	a CONCENTRATION	b. MASS	a. LONG TERM AV	G. VALUE	b. NO. OF
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES		0.1	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Biological Oxygo	en Demand (BOD)	No Sample	(* **).		æ	-		0	PPM	LBS/DAY	-		_
b. Chemical Oxyge	n Demand (COD)	No Sample	44	-	E	æ		0	PPM	LBS/DAY	•		
c. Total Organic Ca	arbon (TOC)	No Sample	-		 	-	- -	0	PPM	LBS/DAY	//æ	(2)	
d. Total Suspended	Solids (TSS)	6.8	67.49	6.8	67.49	2.25	19.46	4	PPM	LBS/DAY	± 	-	-
e. Ammonia (as N)		No Sample	% "	22	*	<u>82</u>		0	PPM	LBS/DAY	-	-	-
f. Flow		VALUE 1,19		VALUE		VALUE 1,037		4	MGD		VALUE 		-
g. Temperature (wi	inter)	VALUE No Sam	ple	VALUE -		VALUE -		0	°C		VALUE -		-
h. Temperature (su	mmer)	VALUE No Sam		VALUE -		VALUE -		0	°C		VALUE 		-
i. pH		No Sample	No Sample	•	-	直		0	STANDARI	UNITS	1- 1-	mijerati.	= 1

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant, For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

	2.MA	RK 'X'			3. I	EFFLUENT				4. UNITS (specif.	y if blank)	5, INTA	KE (optiona	il) (
I. Pollutant and CAS NO. (If	b.	c,	a MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA' available		c. LONG TERM AV		d. No. OF	CONCENTATION	L Wice	LONG TERM AV	G. VALUE	b. NO. OF
available)	Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a. Bromide (24959-67-9)		x	No Sample)	100			*	0	PPM	LBS/DAY	=	164	-
b. Chlorine, Total Residual		х	No Sample		理	.E.C.		1451	0	PPM	LBS/DAY	₽ :	2 4 C	-
c. Color		х	No Sample	 .	:=	5447		=	0	NTU		**	1981	-
d. Fecal Coliform		x	No Sample	*	-	1 4 0			0	COL/100ml	285	-	18 0	
Fluoride 16984-48-8)		x	No Sample	==		773	=:	*	0	PPM	LBS/DAY	#	20	
f. Nitrate - Nitrite (as N)		х	No Sample		(-		-		0	PPM	LBS/DAY		æs	-

ITEM V-B CONTINU	ED		OUTFALL NO. 501
	2.MARK 'X'	3, EFFLUENT	4. UNITS (specify if blank)

	2.MA	RK 'X'			3	EFFLUENT				4. UNITS (sp	occify if blank)	5. INT	AKE (option	ıl)
1. Pollutant and CAS NO. (If available)	a. Believed	b. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D. availabl		c. LONG TERM A (if availab		d No. OF ANALYSES	2. CONCENTRA	b. MASS	s. LONG TERM A	VG VALUE	b. NO. OF
	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(I) CONCENTRATION	(2) MASS	ANALYSE
GC/MS FRACTION													ì	
g. Nitrogen, Total Organic (as N)		x	No Sample					4	0	PPM	LBS/DAY	-	_	+
h Oil & Grease	x		< 5.00	< 49.62	< 5.00	< 49.62	< 5.00	< 43.24	4	PPM	LBS/DAY		-	**
. Phosphorus (as P), Total (7723-14-0)		x	No Sample	2277	224		-		0	PPM	LBS/DAY		2	-
. Radioactivity														
(1) Alpha		×	No Sample		_		22	7 44	0	pCi/L	_	46	147	
(2) Beta		x	No Sample		2			_	0	pCi/L	_			
(3) Radium, Total		x	No Sample	_	200	746	_	_	0	pCi/L			/	
(4) Radium 226, Total		×	No Sample			_			0	pCi/L				
k. Suifate (as SO 4) (14808-79-8)		x	No Sample	<u>.</u>				_	0	PPM	LBS/DAY	_		
Sulfide (25 S)		х	No Sample			**	_		0	PPM	LBS/DAY	-	**	
m. Sulfite (as SO ₃) (14265-45-3)		x	No Sample					-	0	PPM	LBS/DAY	-		
n. Surfacants		x	No Sample					_	0	РРМ	LBS/DAY		_	
o. Aluminum, Total (7429-90-5)		x	No Sample	-					0	РРМ	LBS/DAY	_		
p. Barium Total (7440-39-3)		х	No Sample	40	<u></u>			:	0	PPM	LBS/DAY	4.		
g Boron, Total (7440- 42-8)		x	No Sample	20	12	_		_	0	РРМ	LBS/DAY			
Cobalt, Total (7440-		×	No Sample	_	_				0	PPM	LBS/DAY	_	_	
lron, Total (7439-	x		< 0.25	< 2.48	< 0.25	< 2.48	< 0.25	< 2,16	4	PPM	LBS/DAY		-	
. Magnesium, Total (7439-95-4)		x	No Sample	220	- U.25		0.23	2.10	0	PPM	LBS/DAY	~		-
Molybdenum, Fotal (7439-98-7)		x	No Sample			-			0	PPM	LBS/DAY			
Manganese, Fotal (7439-96-5)		x	No Sample	_			-	R e-	0	PPM	LBS/DAY	-		-
v. Tin, Total (7440- 31-5)		x	No Sample					-	0	PPM	LBS/DAY			
Titanium, Total (7440-32-6)		x	No Sample				_		0	PPM	LBS/DAY	- :-		

EPA I.D. NUMBER (copy from Item I of Form I)	110000340774	OUTFALL NO. 501
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CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenois. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

additional details and re	nuirement	S					- 11111								
Part C.		2 2 4 4 PM	172			2.5	CELLED CE					DIFFE	C DEC	KE (optiona	()
		2. MARK	<u> </u>			b. MAXIMUM 30 D.	FFLUENT AY VALUE (if	c. LONG TERM AV	VG. VALUE	r -	4.1	INITS		- 12	,,
I. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c, Believed	8. MAXIMUM DA	Y VALUE	availabl		(if availab		d. No. OF	& CONCENTR	b. MASS	a. LONG TERM AV	G. VALUE	b. NO. OF
(1) Brancost)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATIO N	(2) MASS	ANALYSES	ATION	0. MA33	(1) CONCENTRATIO N	(2) MASS	ANALYSE
METALS, CYANIDE, A	ND TOTAL	L PHENOL	S												
IM. Antimony, Total (7440-36-0)			к	No Sample	*		1 th	-	-	0	РРМ	LBS/DAY	ш:	i#	_
2M, Arsenic, Total (7440-38-2			x	No Sample			(6)	-	· **	0	РРМ	LBS/DAY	#S	-	-
3M. Beryllium, Total (7440-41-7)			х	No Sample	**	-	311	(+	300	0	РРМ	LBS/DAY	-	-	
4M. Cadmium, Total (7440-43-9)			x	No Sample	•	-	-	-		0	PPM	LBS/DAY	-		
5M. Chromium, Total (7440-47-3)			x	No Sample	=		••		===	0	PPM	LBS/DAY	*	47	=
6M. Copper, Total (7440-50-8)	х	х		< 0,10	< 0.99	< 0,10	< 0.99	< 0.10	< 0.8649	4	РРМ	LBS/DAY	2	241	24
7M. Lead, Total (7439-92-1)			π	No Sample	*	-	2 0	3		0	РРМ	LBS/DAY	3. E	11 55	æs
8M. Mercury, Total (7439-97-6)			х	No Sample	-	-	220	=	7	0	РРМ	LBS/DAY	***	33 7	••
9M. Nickel, Total (7440-02-0)			х	No Sample	•	=	3 00		344	0	РРМ	LBS/DAY	₩	***	***
10M. Selenium, Total (7782-49-2)			х	No Sample	340	-	46)	S	:=	0	PPM	LBS/DAY	-	-	
11M. Silver, Total (7440-22-4			x	No Sample		-	-		:- -	0	PPM	LB\$/DAY	*	375 E	•••
12M. Thallium, Total (7440-28-0)			x	No Sample		-	m2).	-		0	PPM	LBS/DAY		#**	
13M. Zinc, Total (7440-66-6)			x	No Sample	æ	*		-	-	0	PPM	LBS/DAY	₩	*	-
14M. Cynnide, Total (57-12-5)			x	No Sample		*	•	#)	<u>₩</u>	0	PPM	LBS/DAY	-	*	
ISM. Phenois, Total			x	No Sample	72	724		**	192	0	PPM	LBS/DAY	*	-	
JOXIN J.3,7,8-															
.3,7,8- Fetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESUL	TS	No Sample	- 4			£					

CONTINUED FROM PAGE V-3						ilia						OUTFALL NO. 5			
	2.	MARK'	X'			3. El	FLUENT				4. UNITS (specify if blank)		AKE (optio	onal)
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM VALUE (if ava		c. LONG TERM A (if availab		d. No. OF	a.	1.14100	a. LONG TE VAL		b. NO. OF
avaliable j	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(i) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALYSES
GC/MS FRACTION - VOI	ATILE C	OMPOU	NDS					n							
IV_Accrolein (107-02-8)			x	No Sample	*		544	#:	**	0	РРМ	LBS/DAY	18	300	
2V_Acrylonitrile (107-13-1)			x	No Sample	-	-	*	-		0	PPM	LBS/DAY	-	,,	••
3V. Benzene (71-43-2)			x	No Sample	**		#	223	-	0	PPM	LBS/DAY	-	X	-
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			x	No Sample	75	-	! *€		*	0	РРМ	LBS/DAY	**		77 A
6V. Carbon Tetrachloride (56-23-5)			x	No Sample	*	:=	*		-	0	РРМ	LBS/DAY		-	₩.j
7V. Chlorobenzene (108-90-7)			x	No Sample	2 4.	594	9	-	**	0	РРМ	LBS/DAY	**		es X
8V. Chlorodibromomethane (124-48-1)			х	No Sample			3			0	PPM	LBS/DAY	-	41	(#4)!
9V. Chloroethane (75-00-3)			x	No Sample	*	:##	æ		=	0	PPM	LBS/DAY	œ	++0	
10V_2-Chloroethylvinyl Ether (110-75-8)			x	No Sample		::##	:#	4	-	0	PPM	LBS/DAY	: 	***	•••
11V. Chleroform (67-66-3)			ж	No Sample	#	*	122	; * :	120	0	PPM	LB\$/DAY	·		
12V. Dichlorobromomethane (75-27-4)			x	No Sample	78	æ		*	-	0	PPM	LBS/DAY	(-	£.	-
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			х	No Sample	-	72	-			0	PPM	LBS/DAY	<i>1</i> —	•	-
15V: 1,2-Dichloroethane (107-06-2)			x	No Sample		3 —	-	-	-	0	PPM	LBS/DAY	-	-	
16V.1,1-Dichloroethylene (75-35-4)			х	No Sample	. 	197		-	-	0	PPM	LBS/DAY	. 	***	
17V. 1,2-Dichloropropane (78-87-5)			×	No Sample	E	-	E	#	-	0	PPM	LBS/DAY		=	-
18V. 1,3-Dichloropropylene (542-75-6)			х	No Sample	4	漫	-	-	· <u>·</u>	0	PPM	LBS/DAY	===	141	
19V. Ethylbenzene (100-41-4)			х	No Sample	346	·	·=	-	:: **	0	PPM	LBS/DAY	#0	100	••
POV. Methyl Bromide (74-83-9)			x	No Sample	**	-	-	546	544	0	PPM	LBS/DAY		-	
21V Methyl Chloride (74-87-3)			х	No Sample	-	-	V	**	it aa	0	РРМ	LBS/DAY	#8		=

CONTINUED FROM PAGE V-		MARK '	Χ'			3: E	FFLUENT				4. UNITS (s	OUTFALL NO. 5 pecify if blank)	5. INTAI	Œ (optiona	1)
						b. MAXIMUM 30 DA		c. LONG TERM AVO	G. VALUE	T		1000	a. LONG TERM		Ĺ
I. Pollutant and CAS NO. (If	a. Testing	b,	C,	a. MAXIMUM DA	Y VALUE	(If available		available		d No OF	£.		VALUE		b NO 0
availəble)	Required	Believed Present	Believed Absem	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSE
C/MS FRACTION - VOLATIL	LE COMPO	DUNDS (co.	ntinued)	191							107				
2V. Methylene Chloride (75-09-2)			х	No Sample	See	#		(44)	-	D	РРМ	LBS/DAY	34	1940	4.
23V. 1,1,2,2- Fetrachloroethane 79-34-5)			×	No Sample	S#6		75 0	2 20	100	0	РРМ	LBS/DAY	set.	:##	
24V. Tetrachloroethylene (127-18-4)			x	No Sample			9	*	u.	ō	PPM	LBS/DAY	#	**	-
25V. Toluene 108-88-3)			×	No Sample	1.871		~	:**:	9	0	РРМ	LBS/DAY	**	100	-
26V 1,2-Trans- Dichloroethylene (156-60-5)			x	No Sample	24	.	3		Ŧ	0	РРМ	LBS/DAY	:44	194	
27V, 1,1,1-Trichloroethane (71-55-6)			×	No Sample	#					0	РРМ	LBS/DAY	-	refi	3
28V. 1,1,2-Trichloroethane (79-00-5)			х	No Sample	389	æ.	-	- 31 1		0	PPM	LBS/DAY		==	
29V Trichlomethylene (79-01-6)			x	No Sample		-	*	-		0	PPM	LBS/DAY	7H	-	-
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V. Vinyl Chloride (75-01-4)			×	No Sample	:##	202 ***	441		4	0	PPM	LBS/DAY	644	-	
GC/MS FRACTION - ACID CO	MPOUND	S													
1A. 2-Chlorophenol (95-57-8)			×	No Sample	-	54.)	-			0	PPM	LBS/DAY	-		-
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	=	(=)		S#	**	0	PPM	LBS/DAY			
3A. 2,4-Dimethylphenol (105-67-9)			x	No Sample	-	-	**	7 4		0	PPM	LBS/DAY	II.		
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	122		==	28	#1	0	РРМ	LBS/DAY		21	-
5A. 2,4-Dinitrophenol (51-28-5)			x	No Sample	æ	·	*	19	₩.	0	PPM	LBS/DAY	#	₩.	-
5A, 2-Nitrophenol 88-75-5)			x	No Sample	385	3770		:::	#U	0	PPM	LBS/DAY	*	8)	2
A 4-Nitropherol 100-02-7)			х	No Sample	888	122		2.55	#10	0	РРМ	LBS/DAY	₩4	-	=
A P-Chloro-MCresol 59-50-7)	1		x	No Sample	S 55	-	: ***:	2 55	-	0	PPM	LBS/DAY	#J*		-
PA. Pentachloraphenol B7-86-5			х	No Sample	····	*		(0)		0	PPM	LBS/DAY	-	-	=
0A. Phenol (08-95-2)			х	No Sample		-		(#	***	0	PPM	LBS/DAY	-		
1A. 2,4,6-Trichlorophenol 88-05-2)			x	No Sample				v 8		0	PPM	LBS/DAY	-		

CONTINUED FROM PAGE V-5												OUTFALL NO. 5			***
	2,	MARK'	X'				. EFFLUENT	1 1000			4. UNITS (sp	ecify if blank)		Œ (optiona	11)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 I (if availab		c. LONG TERM AV availab	le)	d No. OF	a. CONCENTRATI	b. MASS	a, LONG TERM VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	ON		(1) CONCENTRATION	(2) MASS	ANALISE
SS/MS FRACTION - BASE/NEU	TRAL CON	APOUND:	S												
B. Acenaphthene (83-32-9)			x	No Sample		-	-		-	D	PPM	LBS/DAY	**:	œ	-
2B. Acenaphtylen (208-96-8)			×	No Sample		#	-		-	0	РРМ	LBS/DAY		æ	.
BB. Anthracene (120-12-7)			x	No Sample	je:	÷	# ¹	-	7 <u>2</u>	0	РРМ	LBS/DAY		:=	
4B. Benzidine (92-87-5)			х	No Sample	*			-	-	0	РРМ	LBS/DAY	**	3 4	
5B. Benzo (a) Anthracene (56-55-3)			×	No Sample	: * *	-	**:		-	0	PPM	LBS/DAY	20	-	
5B, Benzo (a) Pyrene (50-32-8)			×	No Sample	.)	7	1	*	is:	D	PPM	LBS/DAY	±.	**	-
7B 3,4-Benzofluoranthene (205-99-2)			x	No Sample	20	-		-		D	РРМ	LBS/DAY	**		
BB. Benzo (ghi) Perylene (191-24-2)			×	No Sample	*		**	œ:		0	PPM	LBS/DAY		:=	
9B. Benzo (k) Fluoranthene (207- 08-9)			×	No Sample	*	=		-	7	0	РРМ	LBS/DAY	-	022	-
10B Bis (2-Chloroethoxy) Methane (111-91-			x	No Sample	-	3	445	-	8	0	PPM	LBS/DAY	die:		-
11B Bis (2-Chloroethyl) Ether (111-44-4)			х	No Sample		*		(**)		0	PPM	LBS/DAY			
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	98	## h	#2	<i>5</i> 75.		0	РРМ	LBS/DAY		-	
13B Bis (2-Ethylhexyl) Phthalate (117-81-7)			x	No Sample	(2)	-	=		<u> </u>	0	PPM	LBS/DAY	-		-
14B 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	:44:	9 0		-		0	PPM	LBS/DAY	-	-	-
15B. Butyl Benzyl Phthalate (85- 68-7)			к	No Sample	353		#2	-	##	0	PPM	LBS/DAY		22	
16B. 2-Chloronaphthalene (91-58- 7)			x	No Sample	*	2 0		140	20	0	PPM	LBS/DAY	546	96 0	
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			x	No Sample	*	æ:	*	æ	*	0	РРМ	LBS/DAY		50	-
18B. Chrysene (218-01-9)			x	No Sample	1.5%	*	-		*	o	PPM	LBS/DAY	-	#7/	-
19B. Dibenzo (a,h) Anthracene (53-70-3)			х	No Sample	·	46 7	=	-	we:	0	PPM	LB\$/DAY	3 a	-	
20B. 1,2-Dichlorobenzene (95-50- 1)	1		ж	No Sample		#5	-		**	0	PPM	LBS/DAY		#D	
1) 21B. 1,3-Di-chlorobenzene (541- 73-1)			x	No Sample	S	**	-		*	0	РРМ	LBS/DAY	72	=	-

CONTINUED FROM PAGE V-												OUTFALL NO. 5			
•	2	. MARK	'X'				FFLUENT				4. UNITS (s	pecify if blank)		E (option	al)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA'		b. MAXIMUM 30 D (if availab	(e)	(if availabl	le)	d, No. OF	a. CONCENTRA	b. MASS	a LONG TERM VALUE		b. NO. OF
ŕ	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE/NE	UTRAL C	OMPOUN	DS (continu	ed)											
22B, 1,4-Dichlorobenzene (106- 16-7)			x	No Sample	-	-	**	₩		0	РРМ	LBS/DAY	**	4	Ē
23B. 3,3-Dichlorobenzidine (91- 94-1)			x	No Sample	æ	***	=		#	0	РРМ	LBS/DAY		-	-
24B, Diethyl Phthalate (84-66- 2)			x	No Sample	o e €	**	5 + 43	**:	-	a	РРМ	LBS/DAY	*	H	-
25B. Dimethyl Phthalate (131 - 11-3)			x	No Sample	4	44	38	24	-	0	РРМ	LBS/DAY			-
26B, Di-N-Butyl Phthalate (84- 74-2)			x	No Sample	res	=	S443		4	0	РРМ	LBS/DAY	5 40	144	-
27B 2,4-Dimitrotoluene (121- 14-2)			x	No Sample	(ii)	-	:=:	**>	*	0	PPM	LBS/DAY	÷+:	The Control	-
28B 2,6-Dinitrotoluene (606- 20-2)			х	No Sample		9 4 0	-		-	0	РРМ	LBS/DAY		=	
29B, Di-N-Octyl Phthalate (117= 84-0)			х	No Sample	1325	#		***	-	0	РРМ	LB\$/DAY		Ħ	-
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			х	No Sample		~	14	**	20	0	РРМ	LBS/DAY	·	_	
31B. Fluoranthene (206-44-0)			х	No Sample		-	(m)		-	0 10	PPM	LBS/DAY	::::::	-	
32B, Fluorene (86-73-7)			х	No Sample) (41	₩ (: ** :	~	**	0	РРМ	LBS/DAY			-
33B. Hexachlorobenzene (118- 74-1)			х	No Sample	in a	-)#41	_	**	0	РРМ	LBS/DAY	-	39 0	-
34B. Hexachlorobutadiene (87- 68-3)			x	No Sample	34	•	*	*		0	PPM	LBS/DAY	· ·	-	-
35B. Hexachlorocyclopentadiene (77- 47-4)			×	No Sample	:==	-	-	a	-	0	РРМ	LBS/DAY	:##	*	-
36B Hexachloroethane (67-72-			x	No Sample			-	-	-	0	PPM	LBS/DAY	-	**.	
37B. Indeno (<i>1,2,3-cd</i>) Pyrene (193-39-5)			×	No Sample	-		38	¥	14	0	PPM	LBS/DAY	-	aı	-
38B, Isophorone (78-59-1)			×	No Sample	æ	**	-	-	3 5	0	РРМ	LBS/DAY	. 	# 1	-
39B. Naphthalene (91-20-3)			×	No Sample		•••	**	**	13#4	0	PPM	LBS/DAY	-	**)	
40B. Nitrobenzene (98-95-3)			×	No Sample	4	*	.22	#	14	0	PPM	LBS/DAY		¥20	-
41 B. N-Nitrosodimethylamine (62-75-9)			×	No Sample	-	245 245	*	(44)	-	0	РРМ	LBS/DAY	<u> </u>	*	-
42B. N-Nitrosodi- N- Propylamine (621-64-7)			х	No Sample	-		7 2 7	=	-	0	РРМ	LBS/DAY	Yapa	-	WET.

CONTINUED FROM PAGE												OUTFALL NO. 5			
	2	. MARK	'X'				FLUENT				4. UNITS (s	pecify if blank)		KE (option	al)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D. (if available		c. LONG TERM AV (if availabl		d No. OF	2 CONCENTRA	b. MASS	a. LONG TERN VALUE		b. NO. OF
,	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION	U. MIASS	(1) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE/	NEUTRA	L COMPO	UNDS (cor	ntinued)											
43B, N- Nitrosodiphenylamine (86-30-6)			x	No Sample	-	#1	=	-	; = :	0	РРМ	LBS/DAY		71 .	-
44B. Phenanthrene (85-01-8)			x	No Sample	-		1445	(**	***	0	PPM	LBS/DAY	-	940	-
(129-00-0			х	No Sample	-		-	**	-	0	PPM	LBS/DAY	N57N	FF.	
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	••	=	#		*	0	РРМ	LBS/DAY	÷	器	-
GS/MS FRACTION - PESTI	CIDES	-													
1P. Aldrin (309-00-2)			x	No Sample	=	_	#4	140	==	0	РРМ	LBS/DAY		→	-
2P. α-BHC (319-84-6)			x	No Sample		*	*	(#E)	877	0	PPM	LBS/DAY	-	555)	-
3P. β-BHC (319-85-7)			x	No Sample	==	==				0	РРМ	LBS/DAY	57 0		
4P. γ-BHC (58-89-9)			х	No Sample	(2)	£1	3	-		0	PPM	LBS/DAY	40	3.5	
SP 8-BHC (319-86-8)			х	No Sample	**	**	-	•		0	PPM	LBS/DAY	-	100	-
6P. Chlordane (57-74-9)			x	No Sample			445	3 €	194	0	PPM	LBS/DAY	 .	:**:	-
7P_4,4'-DDT (50-29-3)			x	No Sample	344	-	***	••	Sage 1	0	PPM	LBS/DAY	-		
8P. 4,4'-DDE (72-55-9)			х	No Sample	98	#:	·	⊕	-	0	РРМ	LBS/DAY	===	:::::	
9P. 4,4'-DDD (72-54-8)			x	No Sample		#10				0	РРМ	LBS/DAY		3	
10P. Dieldrin (60-57-1)			х	No Sample	122	-	-	9 <u>2</u> 2	-22	0	PPM	LBS/DAY		-	
11P. a-Enosulfan (115-29-7)			х	No Sample	144		-) 	-	0	РРМ	LBS/DAY		3 - -7,	-
12P. β-Endosulfan (115-29-7)			x	No Sample	(80)	72	(***)	·**	er .	0	PPM	LBS/DAY	*	-	=
13P- Endosulfan Sulfate (1031-07-8)			х	No Sample	*	**	:	æ		0	РРМ	LBS/DAY		120	
14P. Endrin (72-20-8			x	No Sample	:44:	=	-	194		0	РРМ	LBS/DAY	*	(44)	-
Aldehyde (7421-93-4)			х	No Sample	E		=	:#:	200	0	PPM	LBS/DAY		*	-
16P. Heptachlor 76-44-8			x	No Sample	*	=	22	-	ě	0	PPM	LBS/DAY	-	22	-

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30.

32 64

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

	2	. MARK	X'			3, E	FFLUENT				4. UNITS (s	pecify if blank)	5, INTAI	Œ (optiona	d)
I. Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DAY available)	VALUE (f	c. LONG TERM AV		d. No. OF	8. CONCENTRA	b. MASS	a. LONG TERM AV	G. VALUE	D. NO. OF
available)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
S/MS FRACTION	- PESTIC	IDES (con	imued)		2910										
17P. Heptachlor Epaxide 1024-57-3)			x	No Sample	*		19 4 8	-	-	0	РРМ	LBS/DAY	-	**	
8P. PCB-1242 53469-21-9)	5330		x	No Sample		77.	E#F	**		0	PPM	LBS/DAY	==	3 7 5	
9P. PCB-1254 11097-69-1)			х	No Sample	***				7.	0	РРМ	LBS/DAY	8	*	
OP. PCB-1221 11104-28-2)			x	No Sample	44	20	ne	544	ω,	0	PPM	LBS/DAY	-	**	-
IP_PCB-1232 11131-16-5)			x	No Sample	5 	w.	24	7.00	=0	0	PPM	LBS/DAY	æ:	*	••
2P. PCB-1248 12672-29-6)			х	No Sample	1991		ंडर	K##	-	0	PPM	LBS/DAY		≅	.
3P. PCB-1260 11096-82-5)			х	No Sample	*	-	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			0	РРМ	LB\$/DAY		-	+
4P. PCB-1016 12674-11-2)			x	No Sample	-	-		- G -	-	0	PPM	LBS/DAY	-	**	
25P. Toxaphene 8001-35-2)			x	No Sample	=	-	O re		-	0	PPM	LBS/DAY	=	æ	775

EPA Form 3510-2C (8-90)

Page V-9

EPA I.D. NUMBER (copy from Item I of Form 1) 110000340774

V INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO. 502

PART A -You must provide the results of at least one analysis for every pollutant in this table, Complete one table for each outfall. See instructions for additional details,

				2. EFFLUE	NT				3. UNITS (specif	ŷ if blank)	4, INTAI	KE (optiona	7l)
1. Pollutant	a. MA	XIMUM DAY VALUE	ı	b. MAXIMUM 30 DAY available		c. LONG TERM A' (if availai		d. No. OF	a. CONCENTRATION	b. MASS	a. LONG TERM AV	G. VALUE	b, NQ. OF
		(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES		0.742.25	(I) CONCENTRATION	(2) MASS	ANALYSES
a. Biological Oxygo	en Demand (BOD)	No Sample		i		m:	5	0	PPM	LBS/DAY	To:	=	-
b, Chemical Oxyge	n Demand (COD)	No Sample	#	i e	e/	-	-	0	РРМ	LBS/DAY	=	9	
c, Total Organic Ca	arbon (TOC)	No Sample	#	(-	-	8	8	0	PPM	LBS/DAY	#2	⊞	
d. Total Suspended	Solids (TSS)	No Sample	= :		10=0	*	-	0	PPM	LBS/DAY		-	-
e. Ammonia <i>(as N)</i>		No Sample	*	7 4 5°	724		£ /	0	PPM	LBS/DAY	ω.	-	-
f. Flow		VALUE 0,567		VALUE 0.567		VALUE 0.567		35	MGD		VALUE -		
g. Temperature (wi	nter)	VALUE No Samp	ole	VALUE		VALUE		0	°C		VALUE 		-
h. Temperature (sw	mmer)	VALUE No Same	ple	VALUE		VALUE		0	°C		VALUE		-
і. рН		No Sample	No Sample	-	-	i one de consums T	Made 1000000000000000000000000000000000000	0	STANDARI	UNITS			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall, See the instructions for additional details and requirements.

	2.MA	RK 'X'	·		3.1	EFFLUENT				4. UNITS (specif	y if blank)	5. INTA	KE (optiona	al)
1. Pollutant and CAS NO. (If	b.	C.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA' available		c. LONG TERM AV availale	,	d. No. OF	A011001 = 1=01		a LONG TERM AV	G. VALUE	b. NO. OF
available)	Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCENTRATION	b, MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
a Bromide (24959-67-9)		x	No Sample	æ.	ATT.	==		••	0	PPM	LBS/DAY	**	150	
b. Chlorine, Total Residual		х	No Sample	*	Mark L	Ħ	22/	2	0	PPM	LBS/DAY	<u> </u>	.1220	
c. Color		х	No Sample	941	-	**	=		0	NTU	-		÷:	
d. Fecal Coliform		х	No Sample	**:)	••	-	-	0	COL/100ml	-		#0	
4. Fluoride (16984-48-8)		х	No Sample	**	-	-	-	-	0	PPM	LBS/DAY	355 355		77)
f. Nitrate - Nitrite (as N)		x	No Sample	¥.	.e.	•	#		0	PPM	LBS/DAY		**	-

1	T	EM	V-E	3 CC	NT	INI	JED
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ITEM V-B CONTINUE		RK 'X'			7	TTPL LIPATE				4 IDUTS (as	inie (FMa-14)		AVE (antique	1)
	2.IVIA	KK A				EFFLUENT	r				ecify if blank)	2, 1141.	AKE (optiona	4)
1. Pollutant and CAS NO. (If available)	a. Believed	b. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D. available		c. LONG TERM A (if availal	VG. VALUE	d, No. OF ANALYSES	CONCENTRA	b. MASS	a. LONG TERM A		b. NO. OF
	Present	Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	ANALTSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)		x	No Sample		-	*	-		0	РРМ	LBS/DAY			_
h. Oil & Grease		х	No Sample	-	·		(#)	(##	0	PPM	LBS/DAY		:##	
. Phosphorus (as P), Fotal (7723-14-0)		x	No Sample	22.7				-	0	PPM	LBS/DAY			2
. Radioactivity							12-							
(1) Alpha		х	No Sample			<u> </u>	-	_=	0	pCi/L	-	S=	24	
(2) Beta		x	No Sample					1275	0	pCi/L				-
(3) Radium, Total		x	No Sample	**:		-	-		0	pCi/L	-	_	-	
(4) Radium 226, Total		x	No Sample	220		_	(<u>4</u> 2	122	0	pCi/L			:4	
k. Sulfate (as SO 4) (14808-79-8)										1	1 D0 D 1 V			
. Sulfide (as S)		х	No Sample		-	**	-5	S#1	D	PPM	LBS/DAY		-	7
m. Sulfite (as SO ₃)		х	No Sample				·	•	0	FPM	LBS/DAY	-	Vet	-
(14265-45-3)		x	No Sample	<u> </u>			-	- Tak	0	PPM	LBS/DAY			-
n. Surfacants		×	No Sample	2			-		0	PPM	LBS/DAY		24	
o. Aluminum, Total (7429-90-5)		x	No Sample	H-1	-	=		135	0	PPM	LBS/DAY	#	s=	-
p. Barium Total (7440-39-3)		x	No Sample			1	_	144	0	PPM	LBS/DAY	*	(##	**
q. Boron, Total (7440- 42-8)		x	No Sample		_		_	- E	0	РРМ	LBS/DAY	2 7	1722	
Cobalt, Total (7440-											7.0 1000			
18-4) s. Iron, Total (7439-		х	No Sample	#2	-	:#:) ist:	-	0	PPM	LBS/DAY	555		***
89-6)		x	No Sample	465	44		-		D	PPM	LBS/DAY	= 40	1991	
Magnesium, Fotal (7439-95-4)	į,	x	No Sample						0	PPM	LBS/DAY		· •	
- Molybdenum, Гоіаі (7439-98-7)		x	No Sample				_		0	PPM	LBS/DAY			
v. Manganese, Fotal (7439-96-5)		x	No Sample				_		0	PPM	LBS/DAY			
w. Tin, Total (7440-														
Titanium,		х	No Sample		-		-		0	PPM	LBS/DAY			
otal (7440-32-6)		х	No Sample	- 7	-			-	0	PPM	LBS/DAY	-		-

CONTINUED FROM PAGE V-2

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you must column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements

additional details and re	quirement														
Part C.	1	2. MARK '2	ייע			2 5	CCI I ICA CC					INITS	C INTE	KE (optiona	1)
		MARK 2	X				FFLUENT	1 0110 77771 / 11	(A 1/11/17)		4. 0	INIIS	5. IN I A	KE (opnona	/)
Pollutant and CAS NO. (If available)	a. Testing	b.	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 D. availabl		c, LONG TERM AV (if availab		d No OF	a.	1 24400	a LONG TERM AV	/G. VALUE	b. NO. OF
NO. (II available)	Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATIO N	(2) MASS	ANALYSES	CONCENTR ATION	b. MASS	(1) CONCENTRATIO N	(2) MASS	ANALYSE
METALS, CYANIDE, A	ND TOTAL	PHENOL	S												
1M. Antimony, Total (7440-36-0)			х	No Sample	1441	544	4	-	044	0	РРМ	LBS/DAY	-		-
2M, Arsenic, Total (7440-38-2			x	No Sample	; = ;	See:	(1)	**	3 	0	PPM	LBS/DAY			15
3M. Beryllium, Total (7440-41-7)			x	No Sample	-	- -	3752	-	S##	o	PPM	LBS/DAY	=	Ø	=
4M, Cadmium, Total (7440-43-9)			х	No Sample		120		**		0	PPM	LBS/DAY	-	80	-
5M_Chromium, Total (7440-47-3)			х	No Sample		•	*		÷	0	РРМ	LBS/DAY	-	20	-
6M. Copper, Total (7440-50-8)			x	No Sample	-	122	•	_	022	0	РРМ	LBS/DAY	322	400	
7M. Lead, Total (7439-92-1)			х	No Sample	*	(2)	2	·	:==	0	PPM	LBS/DAY	=	20 0 (r	44 (1)
8M Mercury, Total (7439-97-6)			×	No Sample	? # :	-	-	-		0	PPM	LBS/DAY	••	**	**
9M. Nickel, Total (7440-02-0)			x	No Sample	1			-	1044	0	PPM	LBS/DAY	-	- 8	 .
10M, Selenium, Total (7782-49-2)			x	No Sample	***	·*	æ	**	v-	0	PPM	LBS/DAY	*	===	=
11M. Silver, Total (7440-22-4			x	No Sample	*	-	=	-		0	РРМ	LBS/DAY	-	#	-
12M. Thallium, Total (7440-28-0)			×	No Sample	325	-	* *	=:		0	РРМ	LBS/DAY	-	æ	
13M Zinc, Total (7440-66-6)			x	No Sample		-	*	•	1 -	0	РРМ	LBS/DAY		-	£
14M. Cyanide, Total (57-12-5)			x	No Sample	£	·#	122		-	0	PPM	LBS/DAY	## ·	iga;	:
15M. Phenols, Total			x	No Sample	1	142 142 143 143 143 143 143 143 143 143 143 143		(<u>*</u>	440	0	PPM	LBS/DAY	3.	: ** :	; s
Total DIOXIN															
2,3,7,8- Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESUL	TS	No Sample									

CONTINUED FROM PAGE V-3												OUTFALL NO. 5	02		
	2.	MARK'	X'			3. El	FFLUENT				4. UNITS (s	pecify if blank)		AKE (option	onal)
1. Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM VALUE (if ava		c. LONG TERM A' (if availab		d. No. OF	a.	4 15150	a. LONG TE VALI		b. NO. OF
ачините)	Required	Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA	b. MASS	(1) CONCENTRAT ION	(2) MASS	ANALYSES
GC/MS FRACTION - VOI	ATILE C	OMPOU	NDS					Valley and		V.					
1V. Accrolein (107-02-8)			x	No Sample	4	42		-	9	0	PPM	LBS/DAY		-	5÷
2V. Acrylonitrile (107-13-1)			x	No Sample	<u> </u>			-	•	0	РРМ	LBS/DAY	-	12	
3V. Benzene (71-43-2)			х	No Sample	**	-	.T50	-		0	РРМ	LBS/DAY		-	-
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			х	No Sample	*	-	-	#3	-	0	РРМ	LBS/DAY	×	300	- T
6V. Carbon Tetrachloride (56-23-5)			x	No Sample		-	-	- 9	*	0	РРМ	LBS/DAY		*	-
7V. Chlorobenzene (108-90-7)			x	No Sample	**	144	a .	201	-	0	РРМ	LBS/DAY	-	·	-
8V. Chlorodibromomethane (124-48-1)			x	No Sample	-			•	***	0	РРМ	LBS/DAY	#	*	i
9V. Chloroethane (75-00-3)			х	No Sample		#	#	3 .	2	0	РРМ	LBS/DAY		922	<u>~</u> /
10V. 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample		TEX	25	-	4	0	РРМ	LBS/DAY	144	a	
11V. Chloroform (67-66-3)			x	No Sample	. 	-	77 .	######################################		0	РРМ	LBS/DAY		(#	æ.
12V. Dichlorobromomethane (75-27-4)			x	No Sample	÷:	**	*	4 0		0	РРМ	LBS/DAY	35	(86	117
13V. Dichlorodifluoromethane (75-71-8)				Not Required	I	Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			х	No Sample	.ee.	-		MS		0	PPM	LBS/DAY	1000	9,57	£.
15V. 1,2-Dichloroethane (107-06-2)			х	No Sample	22	-	-	*	123	0	РРМ	LB\$/DAY		144	-
16V. 1,1-Dichloroethylene (75-35-4)			х	No Sample	*	-		-	*	0	PPM	LBS/DAY			+-
17V. 1,2-Dichloropropane (78-87-5)			х	No Sample	**	*	-			0	PPM	LBS/DAY	-		-
18V. 1,3-Dichloropropylene (542-75-6)			х	No Sample	**	-			-	0	PPM	LBS/DAY	3.55		-
19V. Ethylbenzene (100-41-4)			х	No Sample	-	-		<u>e</u> r	142	0	РРМ	LBS/DAY	-		
10V. Methyl Promide (74-83-9)			х	No Sample	*	9	-	-	=	0	PPM	LBS/DAY		221	-
21V. Methyl Chloride (74-87-3)			x	No Sample	. ≆	3 44	**	•	-	0	PPM	LBS/DAY	1044	#0	

CONTINUED FROM PAGE V-		MARK'	x			3. E	FFLUENT				4. UNITS (Specify if blank)		Œ (optiona	ıl)
1. Pollutant and CAS NO. (If	a. Testing	ь.	c.	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DA (if available	Y VALUE	c. LONG TERM AVG	1.5	d. No. OF	a.	-	a LONG TERM VALUE	AVG.	b NO. OF
available)	Required	Believed Present	Believed Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSE
C/MS FRACTION - VOLATII	LE COMPO	OUND\$(co	ntinued)												
2V "Methyleле Chloride (75-09-2)			x	No Sample	#		74	an an	***	0	PPM	LBS/DAY	<u>4</u> 2	-	_
3V. 1,1,2,2- Fetrachloroethane 79-34-5)			×	No Sample	*	-	100 100 100	##.	2 9	0	PPM	LBS/DAY	-	· •	
4V. Tetrachloroethylene 127-18-4)			х	No Sample				¥.	28	0	PPM	LBS/DAY	*	.	•
5V. Toluene 108-88-3)			x	No Sample	.#2c	-	S==	*	es	0	PPM	LBS/DAY		-	-
6V_1,2-Trans- Dichloroethylene 156-60-5)			×	No Sample	*	E .).		35	0	РРМ	LBS/DAY	*	*	
27V. 1,1,1-Trichloroethane 71-55-6)			x	No Sample	980	**	Y##	39)		- 0	PPM	LBS/DAY	**	923	**
28V_1,1,2-Trichloroethane 79-00-5)			x	No Sample	**	,		-)##:	0	РРМ	LBS/DAY	æ	(4+c)	_
9V Trichloroethylene 79-01-6)			x	No Sample	*	,,	844	#	*	0	РРМ	LBS/DAY	##:	>•)	
0V_Trichlorofluoromethane 75-69-4)				Not Required		Not Required		Not Required							
11V_Vinyl Chloride 75-01-4)			×	No Sample	1200 m	**		25		0	PPM	LBS/DAY	**	:##	
C/MS FRACTION - ACID CO	MPOUND	S												,	,
A 2-Chlorophenol 95-57-8)			x	No Sample	;+ •	-	[#		·	0	РРМ	LBS/DAY			*
2A, 2,4-Dichlorophenol 120-83-2)			x	No Sæmple	1-301 (4)	-	344	#*\	3# 3#	0	PPM	LBS/DAY	1843		-
A. 2,4-Dimethylphenol 105-67-9)			x	No Sample	34	4	12	2 31	24	0	PPM	LBS/DAY	-	**	
A. 4,6-Dinitro-OCresol 534-52-1)			x	No Sample	25	o =0	**	9	2	0	PPM	LBS/DAY	122		_
A. 2,4-Dinitrophenol 51-28-5)			x	No Sample	1	Ŧ.	9	8	4	0	РРМ	LBS/DAY	æ	- T	-
A. 2-Nitrophenol 88-75-5)			x	No Sample	æ	#	1 #	.	*	0	РРМ	LBS/DAY	***	=	-
A. 4-Nitrophenol 100-02-7)			х	No Sample	*	₹:	/55	Œ	-	0	РРМ	LB\$/DAY	==		
A. P-Chioro-MCresol 59-50-7)			x	No Sample	.m.	en.(-	-		0	PPM	LBS/DAY	2770	2.55	
A. Pentachlorophenol 87-86-5			к	No Sample		æ:	-	*	:**	0	PPM	LBS/DAY		S375	:3
0A. Phenol (08-95-2) 1A. 2,4,6-Trichlorophenol			х	No Sample	*	#0.	-	*	-	D .	PPM	LBS/DAY	9 0 3	:::	### ###
1A 2,4,6-Trichlorophenol 38-05-2)			x	No Sample		50			S-5	0	PPM	LBS/DAY	-57		-

CONTINUED FROM PAGE V-5	2	MARK	Y				. EFFLUENT				I a librare	OUTFALL NO. 5 pecify if blank)		E (option	1)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA	Y VALUE	b. MAXIMUM 30 I (if availal	DAY VALUE	c. LONG TERM AV		d No OF	a. CONCENTRATI	b MASS	a LONG TERM VALUE	AVG.	b. NO. OF
arante)	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	ON	D MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
S/MS FRACTION - BASE/NEU	TRAL CON	APOUND	S												
B. Acenaphthene (83-32-9)			×	No Sample	15 44	(44)		*	540	0	РРМ	LBS/DAY		3 4 3	
2B Acenaphtylen (208-96-8)			x	No Sample		**	(m)	299	1755	0	РРМ	LBS/DAY	S et	***	
B Anthracene (120-12-7)			x	No Sample	-	*	-	.	#	0	PPM	LBS/DAY	8		
B Benzidine (92-87-5)			×	No Sample	544	-		·#	···	0	PPM	LBS/DAY	54	:##:	
5B. Berizo (a) Anthracene 56-55-3)			×	No Sample	/ 210		-	200		0	РРМ	LBS/DAY	325	825.	
БВ. Велzo (a) Рутепс 50-32-8)			×	No Sample	-		-	*	# #	0	РРМ	LBS/DAY	e -	22	-
/B 3,4-Benzofluoranthene 205-99-2)			х	No Sample	94	-	_	:#		0	PPM	LBS/DAY	e 		
BB. Benzo (ghi) Perylene 191-24-2)			х	No Sample			-	-	-	0	PPM	LBS/DAY	:	-	-
PB. Benzo (k) Fluoranthene (207- 08-9)			x	No Sample	-	-	E			0	PPM	LBS/DAY	7 <u>22</u>		
OB, Bis (2-Chloroethoxy) Methane (111-91-			x	No Sample	-	-	-	24 <u>1</u>	-	0	PPM	LBS/DAY		:=:	-
IB Bis (2-Chloroethyl) Ether 111-44-4)			x	No Sample	-		**	394	:+:	0	PPM	LBS/DAY	C 	**	-
2B. Bis (2-Chloroisopropyl) Ether (102-80-1)			×	No Sample	.=			25	-	0	РРМ	LBS/DAY	1 10	#	20
3B. Bis (2-Ethylhexyl) Phthalate 117-81-7)			x	No Sample	:##	-		8 2	:##	0	РРМ	LBS/DAY	-	144	
4B_4-BromophenylPhenyl Ether 101-55-3)			x	No Sample	æ	300	-	-	**	0	РРМ	LBS/DAY	•••		-
5B. Butyl Benzyl Phthalate (85- 8-7)			x	No Sample		180		185	=	0	PPM	LBS/DAY	÷	3	-
6B. 2-Chloronaphthalene (91-58- ')			x	No Sample) in	=	-	i iš		0	PPM	LBS/DAY	_	120	-
7B. 4-Chlorophenyl Phenyl Ether 7005-72-3)			x	No Sample	::-	300		(ex	-	0	PPM	LBS/DAY	m?	3#	7
8B. Chrysene (218-01-9)			x	No Sample). 			o n	16	0	PPM	LBS/DAY	.	9	
9B. Dibenzo (a,h) Anthracene 53-70-3)			×	No Sample	ü		-		44	0	PPM	LBS/DAY	440	344	-
OB 1,2-Dichlorobenzene (95-50-) 1B. 1,3-Di-chlorobenzene (541-			x	No Sample	ж	·*	æ		:=	0	PPM	LBS/DAY	** 3	v.es	
B. 1,3-Di-chlorobenzene (541- 3-1)			x	No Sample					5	0	РРМ	LBS/DAY	#5	1/22	-

CONTINUED FROM PAGE V-		MARK '	X'			3. EI	FFLUENT				4. UNITS (OUTFALL NO. 5 specify if blank)		E (option	d)
1. Pollutant and CAS NO. (If	a. Testing	b.	c. Believed	a. MAXIMUM DAY	YALUE	b. MAXIMUM 30 D	AY VALUE	c. LONG TERM AV		d, No. OF	8.		a LONG TERM	AVG.	b. NO. O
available)	Required	Believed Present	Absent	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	(I) CONCENTRATION	(2) MASS	ANALYSES	CONCENTRA TION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYS
S/MS FRACTION - BASE/NE	UTRAL C	OMPOUNI	OS (continue	ed)											
B 1,4-Dichlorobenzene (106- 5-7)			х	No Sample	***				#:	0	PPM	LBS/DAY	***	-	72. 12.
B_3,3-Dichlorobenzidine (91- -1)		25	x	No Sample	##A	-	-7		-	0	PPM	LBS/DAY			-
B. Diethyl Phthalate (84-66-			х	No Sample	3)				22	0	PPM	LBS/DAY	¥	-	
B Dimethyl Phthalate (131 -			x	No Sample	***	S 41	**	32	##:	0	PPM	LBS/DAY	**	**	+
6B. Di-N-Butyl Phthalate (64- 4-2)			x	No Sample	3)	·=	#)	*		0	PPM	LBS/DAY	-	*	-
7B 2,4-Dinitrotoluene (121- 4-2)			x	No Sample	1 10	5	4)	19	*	0	PPM	LBS/DAY	42	æ	
8B 2,6-Dinitrotoluene (606- 3-2)			x	No Sample	#9	-	227	1/2	-	0	PPM	LBS/DAY	144		-
PB Di-N-Octyl Phthalate (117- 4-0)			x	No Sample	*	X##	##0	/ /	-	0	PPM	LBS/DAY	**	1 0	
OB 1,2-Diphenylhydrazine as Azobenzene) (122-66-7)			x	No Sample	æ:	ne .		s 	-	0	PPM	LBS/DAY). 	
IB Fluoranthene (206-44-0)			x	No Sample	\$4F	Vi2	200	14	× .	0	PPM	LBS/DAY	+	-	**
2B Fluorene (86-73-7)			x	No Sample	₩	4	¥1	#	527	0	PPM	LBS/DAY	326		-
3B Hexachlorobenzene (118- 4-1)			x	No Sample		7.55	2	-	9	0	PPM	LBS/DAY	/#	-	-
4B. Hexachlorobutadiene (87- 8-3)			×	No Sample	*	*	#1		:#:	0	PPM	LBS/DAY			-
SB. exachlorocyclopentadiene (77- 7-4)			x	No Sample		-		-		0	PPM	LBS/DAY	÷	#	-
6B Hexachloroethane (67-72-			×	No Sample	=	EE 1)3	##-	=	30	0	РРМ	LBS/DAY	1221	2.7	-
7B. Indeno (1,2,3-cd) Pyrene 193-39-5)			х	No Sample	**	14	#	-	*	0	PPM	LBS/DAY	:e:	er L	
BB. Isophorone (78-59-1)			х	No Sample	-	<i>*</i> .		***	3	0	PPM	LBS/DAY	·-	***	
B Naphthalene (91-20-3)			×	No Sample	***			₩.	*	0	PPM	LBS/DAY		9)	#
B. Nitrobenzene (98-95-3)			x	No Sample	946	ω	-	3 0.		0	PPM	LBS/DAY		##X	

0

0

PPM

PPM

LBS/DAY

LBS/DAY

-

Propylamine (621-64-7)

EPA Form 3510-2C (8-90)

42B. N-Nitrosodi- N-

41B N-Nitrosodimethylamine

(62-75-9)

PAGE V-7

--

No Sample

No Sample

x

х

CONTINUED FROM PAGE												OUTFALL NO. 5			
	2	. MARK	'X'				FLUENT				4. UNITS (s	pecify if blank)		Œ (option	al)
Pollutant and CAS NO. (If available)	a. Testing	b. Believed	c. Believed	a. MAXIMUM DA		(if available	e)	c. LONG TERM AV (if availab)	(e)	d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERN VALUE		b. NO. OF
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(I) CONCENTRATION	(2) MASS	ANALYSE
GS/MS FRACTION - BASE	NEUTRA	L COMPO	UNDS (con	tinued)											
13B. N- Nitrosodiphenylamine 86-30-6)			х	No Sample	••	X44	5 24	#)		0	РРМ	LBS/DAY	**		
14B, Phenanthrene 85-01-8)			x	No Sample		7.55	257			0	PPM	LBS/DAY	#	(E	
129-00-0			х	No Sample	1 346	194	::		#3	0	PPM	LBS/DAY	946	1944	
46B. 1,2,4-Trichlorobenzene (120-82-1)			х	No Sample	**	i) e	2.00	-	7 0	0	PPM	LBS/DAY		19	-
GS/MS FRACTION - PESTI	CIDES														
1P. Aldrin (309-00-2)			х	No Sample	##:		-	-	-	0	PPM	LBS/DAY	*	14	ű.
2P. α-BHC (319-84-6)			x	No Sample	220	49		-	2	0	PPM	LBS/DAY	S46	*	
3P. β-BHC (319-85-7)			x	No Sample		-		-	4	D	PPM	LBS/DAY	**		21 0
4P, γ-BHC (58-89-9)			х	No Sample	***	-	-	**:	-	D	PPM	LBS/DAY	-		-
5P. 8-BHC (319-86-8)			х	No Sample			-	_	-	D	РРМ	LBS/DAY	-	-	
6P. Chlordane (57-74-9)			х	No Sample	-	***	157	-	F	0	РРМ	LBS/DAY	差	220	-
7P. 4,4'-DDT (50-29-3)			х	No Sample	-		===	_		0	PPM	LBS/DAY	-	1	-
8P. 4,4'-DDE (72-55-9)			х	No Sample	i <u>a</u> r	22.0	20			0	PPM	LBS/DAY	5 ∓	4 2	-
9P. 4,4'-DDD (72-54-8)			ж	No Sample		4.0	#3.		-	0	PPM	LBS/DAY	.=	5 5	=
10P. Dieldrin (60-57-1)			х	No Sample		-	#2%	***	=	0	PPM	LBS/DAY	-	-	
11P. α-Enosulfan (115-29-7)			х	No Sample	3	#2	2	E	-	0	PPM	LBS/DAY		 .	
12P β-Endosulfan (115-29-7)			х	No Sample	iii ii	**			(#)	0	PPM	LBS/DAY	_	+	-
13P, Endosulfan Sulfate (1031-07-8)			x	No Sample	-	HS.	-	 :	**	0	PPM	LBS/DAY	-	=	
14P, Endrin (72-20-8			х	No Sample				-		0	PPM	LBS/DAY	(A)		
Aldehyde (7421-93-4)			x	No Sample	20	-		##S	144	0	PPM	LBS/DAY	:=	**	
16P. Heptachlor (76-44-8			x	No Sample	-	•• /	= s	-	***	0	PPM	LBS/DAY	i.ee	**	

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

CONTINUEDIRE	*********														
	2	MARK	'X'			3. E	FFLUENT				4. UNITS (s	pecify if blank)	5. INTA	KE (option	d)
1: Pollutant and CAS NO. (If	a. Testing	b. Believed	c. Believed	a, MAXIMUM DA	Y VALUE	b. MAXIMUM 30 DAY available)		c. LONG TERM AV available		d. No. OF	a. CONCENTRA	b. MASS	a. LONG TERM AV	/G. VALUE	b. NO OF
available)	Required	Present	Absent	(J) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TION		(1) CONCENTRATION	(2) MASS	ANALYSES
SS/MS FRACTION	S/MS FRACTION - PESTICIDES (continue		inued)												
7P, Heptachlor Epoxide 1024-57-3)			x	No Sample	-	*	: 	2		0	PPM	LBS/DAY	-		_
18P. PCB-1242 53469-21-9)			х	No Sample	##	-	·=	a 	##3	0	РРМ	LBS/DAY	-	**	-
9P. PCB-1254 11097-69-1)			x	No Sample		-		·-	=	0	PPM	LBS/DAY	-	*	Ē
20P. PCB-1221 11104-28-2)			×	No Sample	**		· • •	-	 .	0	PPM	LBS/DAY	-	-	
P. PCB-1232 11131-16-5)			х	No Sample	-	i=1	·	E : #	-	0	PPM	LBS/DAY	-	*	-
22P. PCB-1248 12672-29-6)			х	No Sample	*	7	c m	N#		0	PPM	LBS/DAY		-	-
3P. PCB-1260 11096-82-5)			х	No Sample	-		22		-	0	PPM	LBS/DAY	-	22	
4P PCB-1016 12674-11-2)			x	No Sample	:#-:	**	**	13 -4	-	0	PPM	LBS/DAY	-	-	
25P. Toxaphene (8001-35-2)		:	х	No Sample		*	255		#s	0	РРМ	LBS/DAY	-	-	-

EPA Form 3510-2C (8-90)

Page V-9

Form 2F

Application for Permit to Discharge Storm Water Associated with Industrial activities

Please print or type in the unshaded areas

EPA ID Number (copy from item 1 of Form 1)
110000340774

Form Approved. OMB No. 2040-0086

Form

2F NPDES



United States Environmental Protection Agency Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)	(list) B. Latitude C. Longitude		D. Receiving Water (name)				
S5	38	32	03	77	16	53	Quantico Creek
S61	38	32	13	77	17	00	Quantico Creek
S42	38	32	14	77	16	42	Potomac River
S31	38	32	03	77	16	51	Potomac River
S36	38	32	10	77	17	45	Potomac River
S37	38	32	09	77	16	46	Potomac River
S49	38	32	20	77	16	38	Potomac River
S77	38	32	25	77	17	18	Potomac River
S78	38	32	30	77	16	20	Potomac River
S79	38	32	33	77	16	20	Potomac River
S80	38	32	37	77	17	20	Potomac River
S86	38	32	26	77	16	28	Quantico Creek
S94	38	32	39	77	16	20	Potomac River
S95	38	32	44	77	17	18	Potomac River
S107	38	32	48	77	16	47	Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions,	2	Affected Outfalls		4. Final Compliance Date	
Agreements, Etc.	number		3. Brief Description of Project	a. reg.	b. proj
Not Applicable					
10 M			11-11-11-11-11-11-11-11-11-11-11-11-11-		
			Andrew Mitself		
			10 - 00 SMINE		
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				31	
COVERAGE OF THE STATE OF THE ST					
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			THE STREET STREET STREET		_

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall, paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

	om the Front					
IV. Narr	ative Description of Pollutant	Sources				1
A. For	each outfall, provide an estimate of the area (an estimate of the total surface area drained b	include units) of impervious	ous surfaces (11	ncluding paved areas and buil	ling roots)	drained to the outrall,
Outfall	Area of Impervious Surface	Total Area Drained	Outfall	Area of Impervious Surfac	e	Total Area Drained
Number	(provide units)	(provide units)	Number	(provide units)		(provide units)
S5 S61	0.021 acres (50%)	3.9 acres 2.8 acres				
S42	0.872 acres (60%) 1.860 acres (20%)	6.6 acres				
342	See attached Storm Water Pollution	O.D acres				
	Prevention Plan (Section 3) for					
	information on the remaining					
B. Prov	stormwater outfalls. vide a narrative description of significant ma	Lerials that are currently o	r in the past th	irce years have been treated, s	stored or di	isposed in a manner to
allo	w exposure to storm water; method of treat	ment, storage, or disposa	il; past and pr	esent materials management	practices of	imployed to minimize
	act by these materials with storm water run		access areas;	and the location, manner, an	d frequenc	y in which pesticides,
	icides, soil conditioners, and fertilizers are a ant materials are currently treated, st		hic Station i	n a manner to allow even	sure to s	torm water
140 Signific	ant materials are currently treated, si	urea, or disposed at t	ilis Station i	n a manner to anow expo	2011 € 10 21	IOI III WALCI.
ì						
i						
	each outfall, provide the location and a des					
	off; and a description of the treatment the sto				r control a	nd treatment measures
	the ultimate disposal of any solid or fluid wa	stes other than by dischar	ge. See Add	lendum the Form 2F		List Codes from
Outfall Number		Treatment				Table 2F-1
S5	Control measures used to reduce po		n Station sto	orm water outfalls include	e:	1-O, 4-A
S61	Settling Ponds, Ash Ponds, Oily Wa					
S42	Containment and Overflow Protecti					
	Maintenance, Spill Prevention and I		Inspections	, Employee Training, Sed	iment	
N/ Man C	and Erosion Control, and Managem	ent of Kunoff.	Wed			
	tormwater Discharges tify under penalty of law that the outfall(s) c	overed by this application	have been ter	ted or evaluated for the preser	nce of none	tormwater discharges
	that all nonstormwater discharges from these					
Name of Off	icial Title (type or print)	Signature	/	1	Date Sig	
C.D. Holle	у	1 / /	D d/I	on.	011	-1
	and Hydro System Operations		1840	reey		15/2012
B. prov	ride a description of the method used, the dat	e of any testing, and the o	nsite drainage	points that were directly obse	ved during	a test.
Dry weath	er Evaluations were conducted with the	Annual Evaluation on t	ine ionowing	g date 9/14/2011.See Appe	וט דו אוטה	the attached SWPPP.
VI. Signi	ficant Leaks or Spills					
Provide ex	xisting information regarding the history of s	ignificant leaks or spills o	f toxic or haza	rdous pollutants at the facility	in the last	three years, including
	cimate date and location of the spill or leak, a					
	1/10/2009Detergent/water discharge	d to Outfall S36 (estir	nated 50-10	0 gallons).; the portable v	vash stati	on & and Port-a-
	ohn were re-located	a I -it C Nantualizat	: D:4 4 O			dDV. 4b
	7/26/2010Process water overflow fr quipment was subsequently repaired.		יטמ דת 10 0	utian 342 (estimated seve	INITUNO	rea ganons); the
Č,	darbment and angednesiti tehunen.					
23						

Continued from Page 2

EPA 1D Number (copy from Item 1 of Form 1)

110000340774

A.B.C. & D: See instruction before proceeding			
	g. Complete one set of tables for each outfal are included on separate sheets numbered VI		space provided.
E. Potential discharges not covered by analyst	sis - is any toxic pollutant listed in table 2F-	2, 2F-3, or 2F-4, a substance or a co	emponent of a substance which
you currently use or manufacture as an inte	ermediate or final product or byproduct?	_	_
Ycs (list all such pollutants below)			No (go to Section IX)
To the best of our knowledge, none	of the pollutants listed in Tables 2	F-2, 2F-3, or 2F-4 that are u	sed or expect to be used
over the next five years at this Statio	on are discharged directly to state	waters without first passing	through a treatment
system. Therefore, these pollutants			
			W. S.
VIII. Biological Toxicity Testing	Data	THE PROPERTY OF THE PROPERTY O	PARTY MARKET
Do you have any knowledge or reason to believe		toxicity has been made on any of yo	ur discharges or on a receiving
water in relation to your discharge within the las	st 3 years?	Г	
Yes (list all such pollutants below)			No (go to Section IX)
Biological toxicity tests required by			
been submitted to the Department o			
tests were performed on process was		DES permit. No biological	toxicity tests have been
performed on discharges from storn	n water designated outfalls.		
			3
IV Co. As a second seco			
IX. Contact analysis Information	Taywal by a vestest laboratory or consulting	a Geni?	
Were any of the analysis reported in item VII pe	rformed by a contact laboratory or consulting	g firm?	No (see to Section V)
Were any of the analysis reported in item VII pe	erformed by a contact laboratory or consulting whone number of, and pollutants	g firm?	No (go to Section X)
Were any of the analysis reported in item VII pe	erformed by a contact laboratory or consulting whone number of, and pollutants	g firm? C. Area Code & Phone No.	No (go to Section X) D. Pollutants Analyzed
Were any of the analysis reported in item VII per Yes (list the name, address, and telep analyzed by, each such laborat	erformed by a contact laboratory or consulting whone number of, and pollutants very or firm below)		
Were any of the analysis reported in item VII per Yes (list the name, address, and telep analyzed by, each such laborat	erformed by a contact laboratory or consulting whone number of, and pollutants very or firm below)		D. Pollutants Analyzed BOD, pesticides,
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A. Name	erformed by a contact laboratory or consulting phone number of, and pollutants very or firm below) B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed BOD, pesticides, herbicides, nitrate,
Were any of the analysis reported in item VII per Yes (list the name, address, and telep analyzed by, each such laborat	erformed by a contact laboratory or consulting phone number of, and pollutants arry or firm below. B. Address 7423 Lee Davis Road		D. Pollutants Analyzed BOD, pesticides,
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A. Name	erformed by a contact laboratory or consulting phone number of, and pollutants very or firm below) B. Address	C. Area Code & Phone No.	BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants,
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A. Name	erformed by a contact laboratory or consulting phone number of, and pollutants arry or firm below. B. Address 7423 Lee Davis Road	C. Area Code & Phone No.	BOD, pesticides, herbicides, nitrate, color, bromide,
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborat A. Name Primary Laboratorics, Inc.	erformed by a contact laboratory or consulting phone number of, and pollutants arry or firm below. B. Address 7423 Lee Davis Road	C. Area Code & Phone No.	BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants,
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A. Name Primary Laboratorics, Inc. X. Certification	erformed by a contact laboratory or consulting phone number of, and pollutants for or firm below. B. Address 7423 Lec Davis Road Mechanicsville, VA 23111	C. Area Code & Phone No. (804) 559-9004	D. Pollutants Analyzed BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A Name Primary Laboratories, Inc. X. Certification I certify under penalty of law that	B. Address 7423 Lee Davis Road Mechanicsville, VA 23111	(804) 559-9004 Is were prepared under my	D. Pollutants Analyzed BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide direction or supervision in
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborate A. Name Primary Laboratories, Inc. X. Certification I certify under penalty of law that accordance with a system designed.	rformed by a contact laboratory or consulting phone number of, and pollutants arry or firm below. B. Address 7423 Lec Davis Road Mechanicsville, VA 23111 It this document and all attachment to assure that qualified personnel.	C. Area Code & Phone No. (804) 559-9004 Is were prepared under my opproperly gather and evaluate	D. Pollutants Analyzed BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide direction or supervision in the information submitted.
Were any of the analysis reported in item VII pe Yes (list the name, address, and telepanalyzed by, each such laborated A. Name Primary Laboratories, Inc. X. Certification I certify under penalty of law that accordance with a system designed Based on my inquiry of the person	rformed by a contact laboratory or consulting phone number of, and pollutants arry or firm below. B. Address 7423 Lec Davis Road Mechanicsville, VA 23111 I this document and all attachment to assure that qualified personnel or persons who manage the system	C. Area Code & Phone No. (804) 559-9004 Is were prepared under my opproperly gather and evaluate to or those persons directly re.	D. Pollutants Analyzed BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide direction or supervision in the information submitted, sponsible for gathering the
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Were any of the analysis reported in item VII per analysed by, each such laborated A. Name A. Name Primary Laboratorics, Inc. X. Certification I certify under penalty of law that accordance with a system designed Based on my inquiry of the person information, the information submethat there are significant penaltic knowing violations. A. Name & Official Title (type or print) C.D. Holley	reformed by a contact laboratory or consulting phone number of, and pollutants ory or firm below. B. Address 7423 Lec Davis Road Mechanicsville, VA 23111 I this document and all attachment to assure that qualified personnel or persons who manage the system itted is, to the best of my knowledges for submitting false information,	ts were prepared under my a properly gather and evaluate a or those persons directly rege and belief, true, accurate, including the possibility of	BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide direction or supervision in the information submitted. sponsible for gathering the and complete. I am aware fine and imprisonment for
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Were any of the analysis reported in item VII per analysed by, each such laborated A. Name A. Name Primary Laboratorics, Inc. X. Certification I certify under penalty of law that accordance with a system designed Based on my inquiry of the person information, the information submethat there are significant penaltic knowing violations. A. Name & Official Title (type or print) C.D. Holley	reformed by a contact laboratory or consulting phone number of, and pollutants ory or firm below. B. Address 7423 Lec Davis Road Mechanicsville, VA 23111 I this document and all attachment to assure that qualified personnel or persons who manage the system itted is, to the best of my knowledges for submitting false information,	ts were prepared under my a properly gather and evaluate to or those persons directly respected to the properly form of the possibility of B. Arca Code and	BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide direction or supervision in the information submitted. sponsible for gathering the and complete. I am aware fine and imprisonment for

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VII. Discharge Information

. Discharge Information (Continued from page 3 of Form 2F)
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details. Outfall S5

Pollutant		Maximum Values (include units)		Values e units)	Number Of	
And CAS Number (if available)	mber Taken During Flow-weighted Taken During Flow-weighted Event	Storm Events Sampled Sources of Pollutants				
Oil & Grease	<5,00 ppm	N/A	<5.00 ppm	N/A	1	General Site Runoff
Biological Oxygen Demand (BOD5)	<3.00 ppm	N/A	<3.00 ppm	N/A	1	General Site Runoff
Chemical Oxygen Demand (COD)	20.42 ppm	N/A	20.42 ppm	N/A	1	General Site Runoff
Total Suspended Solids (TSS)	64.2 ppm	N/A	64.2 ppm	N/A	1	General Site Runoff
Total Organic Nitrogen	0.43 ppm	N/A	0.43 ppm	N/A	1	General Site Runoff
Total Phosphorus	0.19 ppm	N/A	0.19 ppm	N/A	1	General Site Runoff
pН	7.5 Minimum	7.5 Maximum	7.5 Minimum	7.5 Maximum	1	General Site Runoff

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

		m Values	Average		Number	
Pollutant		de units)	(include	e units)	Of	
And	Grab Sample		Grab Sample		Storm	
CAS Number	Taken During	Flow-weighted	Taken During	Flow-weighted	Events	
(if available)	First 30 Minutes	Composite	First 30 Minutes	Composite	Sampled	Sources of Pollutants
рН	See Part A	N/A	N/A	N/A	1	
Phosphorous Total	See Part A	N/A	N/A	N/A		General Site Runoss
Ammonia	See Part C	N/A	N/A	N/A	1	General Site Runoff
Nitrogen Total	See Part A	N/A	N/A	N/A	300	General Site Runoff
Nitrate-Nitrite N Total	See Part C	N/A	N/A	N/A	1	General Site Runoff
Copper Total	See Part C	N/A	N/A	N/A	1	General Site Runoff
Copper dissolved	See Part C	N/A	N/A	N/A	I	General Site Runoff
Chromium Total	See Part C	N/A	N/A	N/A		General Site Runoff
Zinc Total	See Part C	N/A	N/A	N/A		General Site Runoff
Iron Total	See Part C	N/A	N/A	N/A	1	General Site Runoff
TPH	See Part C	N/A	N/A	N/A	1	N/A
Total Suspended Solids	See Part A	N/A	N/A	N/A	1	General Site Runoff
Oil & Grease	See Part A	N/A	N/A	N/A	1	General Site Runoff
126 Priority Pollutants in cooling tower additives.	None of the 126 are present in co	priority pollutants oling tower	N/A	N/A	N/A	N/A
- 1710			3			
					A11 01 01 01 01 01 01 01 01 01 01 01 01 0	

	letails and requirements. Complete of Maximum Values		Average		Number	
Pollutant	(mg/L unless otherwise noted)		(mg/L unless of	herwise noted)	10	
And	Grab Sample		Grab Sample		Storm	Sources of Pollutants
CAS Number	Taken During	Flow-	Taken During	Flow-weighted	Events	
(if available)	First 30 Minutes	weighted	First 30 Minutes	Composite	Sampled	
		Composite		510		Conservation Branch
Ammonia, Total	0.03	N/A	N/A	N/A	1	General Site Runoff
Bromide, Total	0.27	N/A	N/A	N/A	1	General Site Runoff
Chlorine, Total Residual	Believed Absent			51/1		C
Color	34	N/A	N/A	N/A	1	General Site Runoff
Fecal Coliform	Believed Absent		# · · · · · · · · · · · · · · · · · · ·			Si Lott Vo re
Fluoride	0.075	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.55	N/A	N/A	N/A	1 1	General Site Runoff
Nitrogen, Total Org. As N	0.43	N/A	N/A	N/A	1	General Site Runoff
Phosphorus (As P), Total	0.19	N/A	N/A	N/A	1	General Site Runoff
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					
Radium 226 , Total	Believed Absent					
Sulfate (As SO4)	33.55	N/A	N/A	N/A	1	General Site Runoff
Sulfide (As S)	0.08	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent					
Surfactants	0.107	N/A	N/A	N/A	1	General Site Runoff
Aluminum, Total	2.16	N/A	N/A	N/A	1	General Site Runoff
Barium, Total	0.048	N/A	N/A	N/A	1	General Site Runoff
Boron, Total	<0.02	N/A	N/A	N/A	1	N/A
Cobalt, Total	0.0015	N/A	N/A	N/A	1	General Site Runoff
Iron, Total	3.51	N/A	N/A	N/A	1	General Site Runoff
Magnesium, Total	7.14	N/A	N/A	N/A	1	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.1	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	0.087	N/A	N/A	N/A	1	General Site Runoff
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	0.004	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadmium, Total	<0.0003	N/A	N/A	N/A	1	N/A
Chromium, Total	0.003	N/A	N/A	N/A		General Site Runoff
Copper, Total	0.076	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0,008	N/A	N/A	N/A	1 1	General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	- N/A
Nickel, Total	<0.005	N/A	N/A	N/A	1	N/A
Selenium, Total	<0.003	N/A	N/A	N/A	1	N/A
Silver, Total	<0.0001	N/A	N/A	N/A	1	N/A
Thallium, Total	<0.0002	N/A	N/A	N/A		N/A
Zinc, Total	0.046	N/A	N/A	N/A	1	General Site Runoff
Cyanide, Total	<0.005	N/A	N/A	N/A	i	N/A
Phenol	<0.01	N/A	N/A	N/A	i	General Site Runoff
Dioxin Screen	Believed Absent					
Acrolein	<0.01	N/A	N/A	N/A	1	N/A
Acrylonitrile	<0.0015	N/A	N/A	N/A	i	N/A
Benzene	<0.0044	N/A	N/A	N/A	1 1	N/A
Bromoform	<0.0047	N/A	N/A	N/A	1	N/A
Carbon Tetrachloride	<0.0028	N/A	N/A	N/A	1	N/A
Chlorobenzene	<0.006	N/A	N/A	N/A	i i	N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0011	N/A	N/A	N/A	1	N/A
2-Chloroethylvinyl Ether	<0.0012	N/A	N/A	N/A		N/A
Chloroform	<0.0016	N/A	N/A	N/A	i	N/A
Dichlorobromomethane	<0.0022	N/A	N/A	N/A	i	N/A
1,1-Dichloroethane	<0.0047	N/A	N/A	N/A		N/A
1,2-Dichloroethane	<0.0047	N/A	N/A	N/A	i	N/A
1,1-Dichioroethylene	<0.0028	N/A	N/A	N/A	i	N/A
1,2-Dichloropropane	<0.0028	N/A	N/A	N/A	<u> </u>	N/A
1,3-Dichloropropylene	<0.005	N/A	N/A	N/A		N/A N/A
Ethyl Benzene	<0.005		N/A N/A			
Methyl Bromide		N/A N/A	N/A N/A	N/A	1	N/A N/A
	<0.0014	N/A		N/A	1	N/A
Methyl Chloride Methylene Chloride	<0.0011 <0.0028	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A



1,1,2,2-Tetrachloroethane	<0.0069	N/A	N/A	N/A N/A	1	N/A N/A
Tetrachloroethylene Toluene	<0.0041 <0.006	N/A N/A	N/A N/A	N/A N/A		N/A N/A
1.2-Trans-	<0.000	N/A	N/A	N/A	i	N/A
Dichloroethylene	<0.0016	14//4	11//1			
1,1,1-Trichloroethane	<0.0038	N/A	N/A	N/A	1	N/A
1,1,2-Trichloroethane	< 0.005	N/A	N/A	N/A	1	N/A
Crichloroethylene	<0.0019	N/A	N/A	N/A	1	N/A
Vinyl Chloride	<0.0018	N/A	N/A	N/A	1	N/A
2-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2.4-Dichlorophenol	<0.0056	N/A	N/A	N/A N/A	1 1	N/A N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A N/A	N/A	1	N/A
4,6-Dinitro-O-Cresol 2,4-Dinitrophenol	<0.024 <0.042	N/A N/A	N/A	N/A	1 1	N/A
2,4-1/mitrophenot	<0.0036	N/A	N/A	N/A	i	N/A
4-Nitrophenol	<0.0031	N/A	N/A	N/A	i	N/A
P-Chloro-M-Cresol	<0.0024	N/A	N/A	N/A	 	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A		N/A
Phenol	<0.0027	N/A	N/A	N/A		N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A	1	N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	I	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A	1	N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A	1	N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A	1	N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A		N/A
Benzo (K) Fluoranthene	<0.0025	N/A	N/A	N/A	I .	N/A
Bis(2-Chloroethoxy)	.0.0053	N/A	N/A	N/A	1	N/A
Methane	<0.0053 <0.0057	N/A	N/A	N/A	1	N/A
Bis(-2-Chloroethyl) Ether Bis(2-Chloroisopropyl)	<0.0057	N/A N/A	N/A	N/A		N/A
Ether	<0.0057	1877	IV/A	10/A	1 . 1	LVIZE
Bis(2-Ethylhexyl)	~0.0037	N/A	N/A	N/A	1 1	N/A
Phthalate	<0.0025	. 177.				
4-Bromophenyl-Phenyl	7	N/A	N/A	N/A	1	N/A
Ether	<0.003				<u> </u>	
Butyl Benzyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A		N/A
4-Chlorophenyl-Phenyl		N/A	N/A	N/A	1	N/A
Ether	<0.0042					
Chrysene	<0.0025	N/A	N/A	N/A	1	N/A
Dibenzo (A H) Anthracene	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Dichlorobenzene	<0.004	N/A	N/A	N/A		N/A
1,3-Dichlorobenzene	<0.0031	N/A N/A	N/A N/A	N/A N/A	+ + +	N/A N/A
1.4-Dichlorobenzene	<0.0044	2444				N/A N/A
3,3''-Dichlorobenzidine Dicthyl Phthalate	<0.0165 <0.0074	N/A N/A	N/A N/A	N/A N/A		N/A
Dimethyl Phthalate	<0.0075	N/A	N/A	N/A	 	N/A
Di-N-Butyl Phthalate	<0.0064	N/A	N/A	N/A	i i	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A	i	N/A
2,6-Dinitratoluene	<0.0034	N/A	N/A	N/A	i	N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A	i	N/A
1,2-Diphenylhydrazine	<0.0088	N/A	N/A	N/A	1	N/A
Fluoranthene	<0.0022	N/A	N/A	N/A	1	N/A
Fluorene	<0.0022	N/A	N/A	N/A	1	N/A
Hexachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
lexachlorobutadiene	<0.0018	N/A	N/A	N/A	1	N/A
lexachlorocyclopentadien	-0.01	N/A	N/A	N/A	1	N/A
Tana ah launa thu an	<0.01	N/A	NI/4	NI/A		N/A
lexachlorocthane	<0.0024	N/A	N/A	N/A	1	N/A
ndeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1 1	N/A
sophorone Naphthalene	<0.0051	N/A	N/A N/A	N/A N/A	1	N/A N/A
Naphthalene Nitrobenzene	<0.0038 <0.0042	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A N/A	N/A N/A		N/A
N-Nitrosoumemylamine	~0.0002	N/A	N/A	N/A		N/A
Propylamine	<0.0036	177.4	WA	IVA		EMER
N-Nitrosodiphenylamine	<0.0027	N/A	N/A	N/A		N/A
				N/A	i	N/A



Pyrene	<0.0038	N/A	N/A	N/A	1 1	N/A
1,2,4-Trichlorobenzene	<0.0079	N/A	N/A	N/A	1	N/A
Aldrin	<0.00005	N/A	N/A	N/A	1	N/A
Alpha BHC	<0.00005	N/A	N/A	N/A	1	N/A
Beta BIIC	<0.00005	N/A	N/A	N/A	11	N/A
Gamma BHC	<0.00005	N/A	N/A	N/A	1	N/A
Delta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Chlordane	<0.0002	N/A	N/A	N/A	1	N/A
4,4pr DDT	<0.0001	N/A	N/A	N/A	1	N/A
4.4pr DDE	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A	1	N/A
Dieldrin	<0.0001	N/A	N/A	N/A	1	N/A
Alpha-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Beta-Endosulfan	<0.0001	N/A	N/A	N/A	î	N/A
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A	i	N/A
Endrin	<0.0001	N/A	N/A	N/A	i	N/A
Endrin Aldehyde	<0.0001	N/A	N/A	N/A	1	N/A
		N/A	N/A	N/A	1 1	N/A
Heptachlor	<0.00005					
Heptachlor-Epoxide	1000.0>	N/A	N/A	N/A	1	N/A N/A
PCB 1242	100.0>	N/A	N/A	N/A	! !	
PCB 1254	<0.001	N/A	N/A	N/A	1	N/A
PCB 1221	<0.001	N/A	N/A	N/A	1	N/A
PCB 1232	<0.001	N/A	N/A	N/A	11	N/A
PCB 1248	<0.001	N/A	N/A	N/A	!!	N/A
PCB 1260	<0.001	N/A	N/A	N/A	1	N/A
PCB 1016	<0.001	N/A	N/A	N/A	1	N/A
Toxaphene	<0.005	N/A	N/A	N/A	1	N/A
Kepone	<0.0001	N/A	N/A	N/A	1	N/A
Methoxychlor	<0.0001	N/A	N/A	N/A	1	N/A
Mirex	<0.0001	N/A	N/A	N/A	1	N/A
Tributyltin	<0.00003	N/A	N/A	N/A	1	N/A
Demeton	<0.001	N/A	N/A	N/A		N/A
Malathion	<0.001	N/A	N/A	N/A	1	N/A
Parathion	<0.001	N/A	N/A	N/A		N/A
Clorpyrifos	<0.0002	N/A	N/A	N/A	1	N/A
Guthion	<0.001	N/A	N/A	N/A	1	N/A
Silvex	<0.0001	N/A	N/A	N/A	i	N/A
2,4-D	<0.0001	N/A	N/A	N/A	1	N/A
Hardness as CaCO3, Total	99.18	N/A	N/A	N/A	1	N/A
Vanadiun, Total	0.004	N/A	N/A	N/A	1	General Site Runoff
Vanadium (dissolved)	<0.001	N/A	N/A	N/A		N/A
TPH-DRO	<0.5	N/A	N/A	N/A	ı	N/A
TPH-GRO	<0.5	N/A	N/A	N/A	1	N/A
Tl (dissolved)	<0.0002	N/A	N/A	N/A	i i	N/A
Ti (dissolved)	<0.002	N/A	N/A	N/A	i	N/A
Sn (dissolved)	<0.005	N/A	N/A	N/A	i i	N/A
Se (dissolved)	<0.003	N/A	N/A	N/A	i	N/A
Sb (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Pb (dissolved)	<0.001	N/A	N/A	N/A	i	N/A
Ni (dissolved)	<0.005	N/A	N/A	N/A	i	N/A
Mo (dissolved)	0.001	N/A	N/A	N/A	1	General Site Runoff
Hg (dissolved)	<0.002	N/A	N/A	N/A	1	N/A
Cu (dissolved)	0.037	N/A	N/A	N/A	1	General Site Runoff
Cr (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Co (dissolved)	<0.0006	N/A	N/A	N/A	1	N/A N/A
Cd (dissolved)	<0.0003	N/A		N/A N/A		N/A
Be (dissolved)		N/A N/A	N/A	N/A N/A		
	<0.0002		N/A		1 .	N/A Compani Sita Dunoff
Ba (dissolved)	0.033	N/A	N/A	N/A		General Site Runoff
As (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Ag (dissolved)	<0.0001	N/A	N/A	N/A	1	N/A
Zn (dissolved)	<0.01	N/A	N/A	N/A	1	N/A
Mn (dissolved)	<0.02	N/A	N/A	N/A	1	N/A
Mg (dissolved)	5.98	N/A	N/A	N/A	-1	General Site Runoff
Fe (dissolved) Al (dissolved)	<0.05 <0.09	N/A N/A	N/A N/A	N/A N/A	ı ı	N/A N/A

Outfall S61

110000340774

VII. Discharge Information (Continued from page 3 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details. Outfall S61

Pollutant	Maximum Values (include units)		Average (include		Number Of	
And CAS Number (if available)	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Storm Events Sampled	Sources of Pollutants
Oil & Grease	<5.00 ppm	N/A	<5.00 ppm	N/A	1	General Site Runoff
Biological Oxygen Demand (BOD5)	<3.00 ppm	N/A	<3.00 ppm	N/A	1	General Site Runoff
Chemical Oxygen Demand (COD)	<5.00 ppm	N/A	<5.00 ppm	N/A	1	General Site Runoff
Total Suspended Solids (TSS)	5.0 ppm	N/A	5.0 ppm	N/A	1	General Site Runoff
Total Organic Nitrogen	<0,30 ppm	N/A	<0.30 ppm	N/A	1	General Site Runoff
Total Phosphorus	<0.05 ppm	N/A	<0.05 ppm	N/A	1	General Site Runoff
pH	8.2 Minimum	8.2 Maximum	8.2 Minimum	8.2 Maximum	1	General Site Runoss

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

	l .	m Values	Average		Number	
Pollutant		le units)	(include	units)	or	
And CAS Number (if available)	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Storm Events Sampled	Sources of Pollutants
рH	See Part A	N/A	N/A	N/A	1	••
Phosphorous Total	See Part A	N/A	N/A	N/A	1	General Site Runoff
Ammonia	See Part C	N/A	N/A	N/A	1	General Site Runoff
Nitrogen Total	See Part A	N/A	N/A	N/A		General Site Runoff
Nitrate-Nitrite N Total	See Part C	N/A	N/A	N/A	1	General Site Runoff
Copper Total	See Part C	N/A	N/A	N/A	11	General Site Runoff
Copper dissolved	See Part C	N/A	N/A	N/A	1	General Site Runoff
Chromium Total	See Part C	N/A	N/A	N/A	I	General Site Runoff
Zinc Total	See Part C	N/A	N/A	N/A	The state of the s	General Site Runoff
Iron Total	See Part C	N/A	N/A	N/A	1	General Site Runoff
TPH	See Part C	N/A	N/A	N/A	1	N/A
Total Suspended Solids	See Part A	N/A	N/A	N/A	1	General Site Runoff
Oil & Grease	See Part A	N/A	N/A	N/A	1	General Site Runoff
126 Priority Pollutants in cooling tower additives.	None of the 126 p are present in co- additives	oriority pollutants oling tower	N/A	N/A	N/A	N/A

	etails and requirement Maximum		Average	Values	Number	
Pollutant	(mg/L unless othe	rwise noted)	(mg/L unless of	herwise noted)	Ot	Danish of Dallutanta
And	Grab Sample	***	Grab Sample	Flow-weighted	Storm Events	Sources of Pollutants
CAS Number	Taken During First 30 Minutes	Flow- weighted	Taken During First 30 Minutes	Composite	Sampled	
(if available)	First 30 Minutes	Composite	PHSI 30 Minutes	Composite	Sampled	
Ammonia, Total	0.02	N/A	N/A	N/A		General Site Runoff
Bromide, Total	0.17	N/A	N/A	N/A	i	General Site Runoff
Chlorine, Total Residual	Believed Absent	1,7,7				
Color	20	N/A	N/A	N/A	1 4	General Site Runoff
Fecal Coliform	Believed Absent					
Fluoride	0.055	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.73	N/A	N/A	N/A	1	General Site Runoff
Nitrogen, Total Org. As N	<0.30	N/A	N/A	N/A		
Phosphorus (As P), Total	<0.05	N/A	N/A	N/A	1	
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					100 100
Radium 226 , Total	Believed Absent		5111	811A		Can1 Clt- 11
Sulfate (As SO4)	40.94	N/A	N/A	N/A	1	General Site Runoff
Sulfide (As S)	0.12	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent	8774	NT/A	N:/A	, -	General Site Runoff
Surfactants	0.118	N/A	N/A	N/A N/A	1	General Site Runoff
Aluminum, Total	0.67	N/A	N/A N/A	N/A N/A		General Site Runoff
Barium, Total	0.045	N/A N/A	N/A N/A	N/A	1	General Site Runoff
Boron, Total Cobalt, Total	0.02 <0.0006	N/A N/A	N/A N/A	N/A	1	N/A
Cobait, Total	1.06	N/A	N/A	N/A	i	General Site Runoff
Magnesium, Total	8.48	N/A	N/A	N/A	i	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.02	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	<0.002	N/A	N/A	N/A		N/A
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	<0.003	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadmium, Total	<0.0003	N/A	N/A	N/A	1	N/A
Chromium, Total	<0.001	N/A	N/A	N/A	1	N/A
Copper, Total	0.002	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0.010	N/A	N/A	N/A	1	General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	N/A
Nickel, Total	<0.005	N/A	N/A	N/A	1	N/A N/A
Selenium, Total	<0.003	N/A	N/A	N/A	1 1	N/A N/A
Silver, Total	<0.0001 <0.0002	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A
Thallium, Total Zinc, Total	0.020	N/A N/A	N/A N/A	N/A	1	General Site Runoff
Cyanide, Total	<0.005	N/A N/A	N/A	N/A	i	N/A
Phenol	<0.005	N/A N/A	N/A	N/A	i	General Site Runoff
Dioxia Screen	Believed Absent				1 27 10	
Acrolein	<0.01	N/A	N/A	N/A		N/A
Acrylonitrile	< 0.0015	N/A	N/A	N/A	1	N/A
Benzene	<0.0044	N/A	N/A	N/A	ī	N/A
Bramoform	<0.0047	N/A	N/A	N/A	1	N/A
Carbon Tetrachloride	<0.0028	N/A	N/A	N/A	1	N/A
Chlorobenzene	<0.006	N/A	N/A	N/A		N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0011	N/A	N/A	N/A	1	N/A
2-Chloroethylvinyl Ether	<0.0012	N/A	N/A	N/A	1 1	N/A
Chloroform	<0.0016	N/A	N/A	N/A N/A	1	N/A N/A
Dichlorobromomethane	<0.0022	N/A	N/A	N/A	1 - 1	N/A
1,1-Dichloroethane	<0.0047	N/A	N/A N/A	N/A	1	N/A N/A
1,2-Dichloroethane	<0.0028	N/A	N/A N/A	N/A	1	N/A N/A
1,1-Dichlornethylene	<0.0028	N/A	N/A	N/A N/A		N/A N/A
1,2-Dichloropropane	<0.006	N/A	N/A	N/A N/A		N/A N/A
1.3-Dichloropropylene	<0.005	N/A	N/A	N/A N/A		N/A N/A
	-0.00mg					
Ethyl Benzene	<0.0072	N/A	N/A N/A			
	<0.0072 <0.0014 <0.0011	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	1 1	N/A N/A



1.1.2.2-Tetrachloroethane	<0.0069	N/A	N/A	N/A		N/A
Tetrachloroethylene	<0.0041	N/A	N/A	N/A	1	N/A N/A
Toluene	<0.006	N/A	N/A	N/A	1	N/A N/A
1,2-Trans-	10.0016	N/A	N/A	N/A	1	IN/A
Dichloroethylene	<0.0016 <0.0038	N/A	N/A	N/A	<u>1</u>	N/A
1,1,1-Trichloroethane 1,1,2-Trichloroethane	<0.0038	N/A N/A	N/A	N/A	i	N/A
Trichloroethylene	<0.005	N/A	N/A	N/A	<u> </u>	N/A
Vinyl Chloride	<0.0019	N/A	N/A	N/A	i	N/A
2-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2.4-Dichtorophenol	<0.0056	N/A	N/A	N/A	1	N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A	N/A	1	N/A
4,6-Dinitro-O-Cresol	<0.024	N/A	N/A	N/A	1	N/A
2,4-Dinitrophenol	<0.042	N/A	N/A	N/A	1	N/A
2-Nitrophenol	<0.0036	N/A	N/A	N/A	1	N/A
4-Nitrophenol	<0.0024	N/A	N/A	N/A	1	N/A
P-Chloro-M-Cresol	<0.0075	N/A	N/A	N/A	1	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A	1	N/A
Phenol	<0.0027	N/A	N/A	N/A	1	N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A		N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	!	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A		N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A		N/A N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A N/A		N/A N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A N/A		N/A N/A
Benzo (K) Fluoranthene	<0.0025	N/A N/A	N/A N/A	N/A N/A	1	N/A
Bis(2-Chloroethoxy) Methanc	<0.0053	IN/A	NA	IV/A	1 1	19/4
Bis(-2-Chloroethyl) Ether	<0.0057	N/A	N/A	N/A		N/A
Bis(2-Chloroisopropyl)	50,00.57	N/A	N/A	N/A	i	N/A
Ether	<0.0057	10/4	14774	10	·	
Bis(2-Ethylhexyl)	40.0031	N/A	N/A	N/A	1	N/A
Phthalate	<0.0025					
4-Bromophenyl-Phenyl	1	N/A	N/A	N/A	I	N/A
Ether	<0.003					
Butyl Benzyl Phthalate	<0.0025	N/A	N/A	N/A), I	N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A	1 0000	N/A
4-Chlorophenyl-Phenyl		N/A	N/A	N/A	1	N/A
Ether	<0.0042				L	
Chrysene	<0.0025	N/A	N/A	N/A	1	N/A
Dibenzo (A II) Anthracene	<0.0025	N/A	N/A	N/A	1 1	N/A
1,2-Dichlorobenzene	<0.004	N/A	N/A	N/A	1	N/A
1,3-Dichlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
1,4-Dichlorobenzene	<0.0044	N/A	N/A N/A	N/A	1	N/A
3,3"-Dichlorobenzidine	<0.0165	N/A	N/A	N/A	1	N/A
Diethyl Phthalate	<0.0074 <0.0075	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A
Dimethyl Phthalate Di-N-Butyl Phthalate	<0.0075	N/A N/A	N/A	N/A	1	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A		N/A
2,4-Dinitrotoluene	<0.0034	N/A N/A	N/A	N/A N/A		N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A	i i	N/A
1,2-Diphenylhydrazine	<0.0023	N/A	N/A	N/A		N/A
Huoranthene	<0.0022	N/A	N/A	N/A	i i	N/A
Fluorene	<0.0022	N/A	N/A	N/A	i	N/A
lexachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
Hexachlorobutadiene	<0.0018	N/A	N/A	N/A	1	N/A
lexachlorocyclopentadien		N/A	N/A	N/A	1	N/A
	<0.01					
lexachloroethane	<0.0024	N/A	N/A	N/A		N/A
ndeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1	N/A
sophorone	<0.0051	N/A	N/A	N/A		N/A
Naphthalene	<0.0038	N/A	N/A	N/A	1	N/A
Nitrobenzene	<0.0042	N/A	N/A	N/A	1	N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A	N/A	11	N/A
N-Nitroso-Di-N-		N/A	N/A	N/A	1	N/A
Propylamine	<0.0036					
N-Nitrosodiphenylamine	<0.0027	N/A	N/A	N/A	1	N/A
Phenanthrene	< 0.0054	N/A	N/A	N/A	1	N/A



Ругеле	<0.0038	N/A	N/A	N/A I	N/A
1,2,4-Trichlorobenzenc	<0.0079	N/A	N/A	N/A	N/A
Aldrin	<0.00005	N/A	N/A	N/A	
Alpha BHC	< 0.00005	N/A	N/A	N/A	
Beta BHC	<0.00005	N/A	N/A	N/A	
Gamma BHC	< 0.00005	N/A	N/A	N/A I	N/A
Delta BHC	< 0.00005	N/A	N/A	N/A	N/A
Chlordane	<0.0002	N/A	N/A	N/A	I N/A
4.4pr DDT	< 0.0001	N/A	N/A	N/A	N/A
4,4pr DDE	<0.0001	N/A	N/A	N/A	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A	I N/A
	<0.0001	N/A	N/A		N/A
Dieldrin					
Alpha-Endosulfan	<0.0001	N/A	N/A		
Beta-Endosulfan	<0.0001	N/A	N/A		N/A
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A	
Endrin	<0.0001	N/A	N/A	N/A	
Endrin Aldehyde	<0.0001	N/A	N/A	N/A	
leptachlor	<0.00005	N/A	N/A	N/A	
Teptachlor-Epoxide	<0.0001	N/A	N/A		N/A
PCB 1242	<0.001	N/A	N/A		I N/A
PCB 1254	<0.001	N/A	N/A	N/A	
CB 1221	<0.001	N/A	N/A		I N/A
CB 1232	<0.001	N/A	N/A	N/A	
CB 1248	<0.001	N/A	N/A		I N/A
PCB 1260	<0.001	N/A	N/A		I N/A
CB 1016	<0.001	N/A	N/A		I N/A
Toxaphene	<0.005	N/A	N/A	N/A	I N/A
Керопе	<0.0001	N/A	N/A	N/A	N/A
Methaxychlor	<0.0001	N/A	N/A	N/A	I N/A
direx	<0.0001	N/A	N/A	N/A	N/A
Pributyltin	<0.00003	N/A	N/A		l N/A
Demeton	<0.001	N/A	N/A		1 N/A
Malathion	<0.001	N/A	N/A		l N/A
Parathion	<0.001	N/A	N/A		N/A
Clorpyrifos	<0.0002	N/A	N/A		N/A
Guthion	<0.001	N/A	N/A		N/A
Silvex	<0.0001	N/A	N/A		N/A
2,4-D	<0.0001	N/A	N/A		N/A
Hardness as CaCO3, Total	92,34	N/A	N/A	N/A	
Vanadiun, Total	0.005	N/A	N/A	N/A	
Vanadium (dissolved)	0.003	N/A	N/A		General Site Runoff
rph-Dro	<0.5	N/A	N/A		N/A
TPH-GRO	<0.5	N/A	N/A		I N/A
[[(dissolved)	<0.0002 <0.002	N/A N/A	N/A N/A		I N/A N/A
(dissolved)	<0.002	N/A N/A	N/A		I N/A N/A
Sn (dissolved)		N/A N/A	N/A		
Se (dissolved)	<0.003				
b (dissolved)	<0.001	N/A	N/A		I N/A
'b (dissolved)	<0.001	N/A	N/A		I N/A
vi (dissolved)	<0.005	N/A	N/A		N/A
10 (dissolved)	<0.001	N/A	N/A		I N/A
lg (dissolved)	<0.0002	N/A	N/A		N/A
Cu (dissolved)	0.001	N/A	N/A		General Site Runoff
r (dissolved)	<0.001	N/A	N/A		I N/A
o (dissolved)	<0.0006	N/A	N/A		N/A
d (dissolved)	<0.0003	N/A	N/A		N/A
le (dissolved)	<0.0002	N/A	N/A		N/A
la (dissolved)	0.048	N/A	N/A		General Site Runoff
ks (dissolved)	<0.003	N/A	N/A		I N/A
(dissolved)	<0.0001	N/A	N/A		1 N/A
In (dissolved)	<0.01	N/A	N/A		1 N/A
An (dissolved)	<0.02	N/A	N/A		N/A
Mg (dissolved)	8.26	N/A	N/A	N/A	I General Site Runoff
e (dissolved)	<0.05	N/A	N/A	N/A	I N/A
	<0.09	N/A	N/A		N/A

General Site Runoff

1

Phosphorus

pН

6.5 Minimum

6. 5 Maximum

110000340774

VII. Discharge Inf	formation	(Continued fro	m page 3 of For	·m 2F)		7 W
			is for every pollutant	in this table. Compl	ete one table for e	each outfall. See instructions for
additiona Pollutant		m Values de units)	Average (include		Number Of	
And CAS Number (if available)	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Storm Events Sampled	Sources of Pollutants
Oil & Grease	<5.00 ppm	N/A	<5.00 ppm	N/A	1	General Site Runoff
Biological Oxygen Demand (BOD5)	<3.00 ppm	N/A	<3.00 ppm	N/A	1	General Site Runoff
Chemical Oxygen Demand (COD)	16.69 ррт	N/A	16.69 ppm	N/A	1	General Site Runoff
Total Suspended Solids (TSS)	92.1 ppm	N/A	92.1 ppm	N/A	1	General Site Runoff
Total Organic Nitrogen	<0.30 ppm	N/A	<0.30 ppm	N/A	1	General Site Runoff
Total Phosphorus	0.27 ppm	N/A	0.27 ppm	N/A	1	General Site Runoff

List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

6. 5 Maximum

6.5 Minimum

Of Storm Events Sampled /A 1 /A	u u
reighted posite Sampled Sample	General Site Runoff
/A	General Site Runoff
/A 1	General Site Runoff
/A 1	General Site Runoff
/A I / / / / / / / / / / / / / / / / / /	General Site Runoff
/A 1	General Site Runoff General Site Runoff General Site Runoff General Site Runoff
/A 1 /A 1 /A 1 /A 1 /A 1	General Site Runoff General Site Runoff General Site Runoff
/A 1 /A 1 /A 1 /A I	General Site Runoff General Site Runoff
/A 1 /A I	General Site Runoff
/A I	
	General Site Runoff
/A 1	N/A
/A 1	General Site Runoff
/A 1	General Site Runoff
/A N/A	N/A
N	N/A N/A

	Maximum \		Average		Number	
Pollutant	(mg/L untess othe	rwise noted)	(mg/L unless of	herwise noted)	Of	Sources of Pollutants
And CAS Number	Grab Sample Taken During	Flow-	Grab Sample Taken During	Flow-weighted	Storm Events	Sources of Fountains
(if available)	First 30 Minutes	weighted	First 30 Minutes	Composite	Sampled	
(ij nvanabie)	Tital 50 Minutes	Composite	I mai ou minutes	Composite	J	
Ammonia, Total	0.08	N/A	N/A	N/A	1	General Site Runoff
Bromide, Total	0.21	N/A	N/A	N/A		General Site Runoff
Chlorine, Total Residual	Believed Absent					
Color	48	N/A	N/A	N/A	1	General Site Runoff
Fecal Coliform	Believed Absent					
Fluoride	0.080	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.79	N/A	N/A	N/A		General Site Runoff
Nitrogen, Total Org. As N	<0.30	N/A	N/A	N/A	1	
Phosphorus (As P), Total	0.27	N/A	N/A	N/A	1	General Site Runoff
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					
Radium 226, Total	Believed Absent		N	N 111		C10's D
Sulfate (As SO4)	24.80	N/A	N/A	N/A		General Site Runoff
Sulfide (As S)	0.08	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent	SALE SERVICES				
Surfactants	<0.100	N/A	N/A	N/A	1	(1
Aluminum, Total	3.04	N/A	N/A	N/A	1	General Site Runoff
Barium, Total	0.048	N/A	N/A	N/A	1	General Site Runoff
Boron, Total	0.03	N/A	N/A	N/A	1	General Site Runoff
Cobalt, Total	0.0027	N/A	N/A	N/A	1	General Site Runoff
Iron, Total	5.26	N/A	N/A	N/A	11	General Site Runoff
Magnesium, Total	5.65	N/A	N/A	N/A	1	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.13	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	0.011	N/A	N/A	N/A		General Site Runoff
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	<0.003	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadminm, Total	0.0003	N/A	N/A	N/A	1	General Site Runoff
Chromium, Total	0.003	N/A	N/A	N/A		General Site Runoff
Copper, Total	0,034	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0.013	N/A	N/A	N/A		General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	N/A
Nickel, Total	0.024	N/A	N/A	N/A	1	General Site Runoff
Selenium, Total	<0.003	N/A	N/A	N/A	1	N/A
Silver, Total	<0.0001	N/A	N/A	N/A	1	N/A
Thallium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Zinc, Total	0.246	N/A	N/A	N/A		General Site Runoff
Cyanide, Total	<0.005	N/A	N/A	N/A	1 1	N/A
Phenol	0.10	N/A	N/A	N/A	1	General Site Runoff
Dioxin Screen	Believed Absent	B1/A	NUA	NIZA		N/A
Acrolein	<0.01	N/A N/A	N/A N/A	N/A N/A		N/A N/A
Acrylonitrile Benzene	<0.0015 <0.0044	N/A N/A	N/A N/A	N/A	1 -	N/A N/A
Bromoform	<0.0044	N/A N/A	N/A N/A	N/A	1	N/A N/A
Carbon Tetrachloride	<0.0047	N/A N/A	N/A N/A	N/A N/A	1	N/A
Chlorobenzene	<0.0028	N/A N/A	N/A N/A	N/A	11-	N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0031	N/A	N/A	N/A	i i	N/A
2-Chloroethylvinyl Ether	<0.0011	N/A	N/A	N/A	1	N/A
Chloroform	<0.0012	N/A	N/A	N/A	1 1	N/A
Dichlorobromomethane	<0.0016	N/A	N/A	N/A	i	N/A
1.1-Dichlorocthane	<0.0022	N/A	N/A	N/A	1	N/A
	<0.0047	N/A N/A	N/A N/A	N/A	1	N/A N/A
1,2-Dichloroethane		N/A N/A	N/A N/A	N/A N/A		N/A N/A
1.1-Dichloroethylene	<0.0028			N/A	1	N/A
1,2-Dichloropropane	<0.006	N/A N/A	N/A	N/A N/A	1	N/A N/A
1,3-Dichloropropylene	<0.005	N/A	N/A			
Ethyl Benzene	<0.0072	N/A	N/A	N/A		N/A N/A
Methyl Bromide	<0.0014	N/A	N/A	N/A	1	N/A
Methyl Chloride Methylene Chloride	<0.0011 <0.0028	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A

1,1,2,2-Tetrachloroethane	<0.0069	N/A	N/A	N/A		N/A N/A
l'oluene	<0.0041	N/A N/A	N/A N/A	N/A N/A	1	N/A N/A
	<0.006	N/A N/A	N/A N/A	N/A	1	N/A
1,2-Trans- Dichloroethylene	<0.0016	.N/A	N/A	MA	'	1474
.1.1-Trichloroethane	<0.0038	N/A	N/A	N/A	1	N/A
1.2-Trichloroethane	<0.005	N/A	N/A	N/A	1	N/A
Crichloroethylene	<0.0019	N/A	N/A	N/A	i	N/A
Vinyl Chloride	<0.0018	N/A	N/A	N/A	1	N/A
-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2,4-Dichlorophenol	<0.0056	N/A	N/A	N/A	1	N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A	N/A	1	N/A
1,6-Dinitro-O-Cresol	<0.024	N/A	N/A	N/A	1	N/A
2,4-Dinitrophenol	<0.042	N/A	N/A	N/A	1	N/A
2-Nitrophenol	<0.0036	N/A	N/A	N/A	1	N/A
4-Nitrophenol	<0.0024	N/A	N/A	N/A	1	N/A
P-Chloro-M-Cresol	<0.0075	N/A	N/A	N/A	1	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A	1	N/A
Phenol	<0.0027	N/A	N/A	N/A	1	N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A		N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	.N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	1	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A	1 1	N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A	1	N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A	1	N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A	1	N/A
Benzo (K) Fluoranthene	<0.0025	N/A	N/A	N/A	1	N/A
Bis(2-Chloroethoxy)		N/A	N/A	N/A	1	N/A
Methane	<0.0053			N/14		
Bis(-2-Chloroethyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Ris(2-Chloroisopropyl)	-0.00	N/A	N/A	N/A	1	N/A
Ether	<0.0057	NI/A	NIA	N//A	· · · · · · · · · · · · · · · · · · ·	N/A
Bis(2-Ethylhexyl)	<0.0025	N/A	N/A	N/A	1	NA
Phthalate 4-Bromophenyl-Phenyl	<0.0023	N/A	N/A	N/A		N/A
Ether	<0.003	NA	19724	IV/A		NA
Butyl Benzyl Phthainte	<0.005	N/A	N/A	N/A		N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A	<u> </u>	N/A
4-Chlorophenyl-Phenyl	~0.0040	N/A	N/A	N/A		N/A
Ether	<0.0042	1377	13775	1300		1772
Chrysene	<0.0025	N/A	N/A	N/A		N/A
Dibenzo (A H) Anthracene	<0.0025	N/A	N/A	N/A	i i	N/A
1.2-Dichlorobenzene	<0.004	N/A	N/A	N/A	1	N/A
1,3-Dichlorobenzene	<0.0031	N/A	N/A	N/A	i	N/A
1.4-Dichlorobenzene	<0.0044	N/A	N/A	N/A	1	N/A
3,3"-Dichlorobenzidine	< 0.0165	N/A	N/A	N/A	i	N/A
Diethyl Phthalate	<0.0074	N/A	N/A	N/A	1	N/A
Dimethyl Phthalate	<0.0075	N/A	N/A	N/A	1	N/A
Di-N-Butyl Phthalate	< 0.0064	N/A	N/A	N/A	i i	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A	1	N/A
2,6-Dinitrotoluene	<0.0034	N/A	N/A	N/A	1	N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A		N/A
1,2-Diphenylhydrazine	<0.0088	N/A	N/A	N/A	i i	N/A
Fluoranthene	<0.0022	N/A	N/A	N/A		N/A
Fluorene	<0.0022	N/A	N/A	N/A	11	N/A
Texachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
Icxachlorobutadienc	<0.0018	N/A	N/A	N/A	1	N/A
lexachlorocyclopentadien		N/A	N/A	N/A	1	N/A
	<0.01					
Icxachloroethane	<0.0024	N/A	N/A	N/A		N/A
ndeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1	N/A
sophorone	<0.0051	N/A	N/A	N/A		N/A
Naphthalene	<0.0038	N/A	N/A	N/A	1	N/A
Vitrobenzene	<0.0042	N/A	N/A	N/A	1,	N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A	N/A	<u> </u>	N/A
N-Nitroso-Di-N-	<0.0037	N/A	N/A	N/A	1	N/A
Propylamine	<0.0036	NI/A	N// A	B1/4	 	NII A
N-Nitrosodiphenylamine	<0.0027	N/A N/A	N/A N/A	N/A N/A	1 1	N/A

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Pyrene	<0.0038	N/A	N/A	N/A 1	N/A
1,2,4-Trichlorobenzene	<0.0079	N/A	N/A	N/A 1	N/A
Aldrin	<0.00005	N/A	N/A	N/A 1	N/A
Alpha BHC	<0.00005	N/A	N/A	N/A 1	N/A
Beta BHC	<0.00005	N/A	N/A	N/A 1	N/A
Gamma BHC	<0.00005	N/A	N/A	N/A I	N/A
Delta BIIC	<0.00005	N/A	N/A	N/A 1	N/A
Chlordane	<0.0002	N/A	N/A	N/A 1	N/A
4,4pr DDT	<0.0001	N/A	N/A	N/A I	N/A
4,4pr DDE	<0.0001	N/A	N/A	N/A 1	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A 1	N/A
Dieldrin	<0.0001	N/A	N/A	N/A 1	N/A
Alpha-Endosulfan	<0.0001	N/A	N/A	N/A 1	N/A
Beta-Endosulfan	<0.0001	N/A	N/A	N/A 1	
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A 1	N/A
Endrin	< 0.0001	N/A	N/A	N/A J	N/A
Endrin Aldehyde	<0.0001	N/A	N/A	N/A 1	N/A
leptachlor	< 0.00005	N/A	N/A	N/A I	
leptachlor-Epoxide	<0.0001	N/A	N/A	N/A 1	
PCB 1242	100.0>	N/A	N/A	N/A I	N/A
PCB 1254	<0.001	N/A	N/A	N/A I	
PCB 1221	<0.001	N/A	N/A	N/A I	
PCB 1232	<0.001	N/A	N/A	N/A i	
PCB 1248	<0.001	N/A	N/A	N/A 1	N/A
PCB 1260	<0.001	N/A	N/A	N/A 1	
PCB 1016	<0.001	N/A	N/A	N/A 1	N/A
l'oxaphene	<0.005	N/A	N/A	N/A 1	N/A
Kepone	<0.0001	N/A	N/A	N/A 1	N/A
Viethoxychlor	<0.0001	N/A	N/A	N/A I	N/A
Mirex	<0.0001	N/A	N/A	N/A I	N/A
Fributyltin	<0.00003	N/A	N/A	N/A I	N/A
Demeton	<0.001	N/A	N/A	N/A I	N/A
Malathion	< 0.001	N/A	N/A	N/A I	N/A
Parathion	< 0.001	N/A	N/A	N/A I	N/A
Clorpyrifos	< 0.0002	N/A	N/A	N/A 1	N/A
Guthlon	<0.001	N/A	N/A	N/A 1	N/A
Silvex	< 0.0001	N/A	N/A	N/A 1	N/A
2,4-1)	< 0.0001	N/A	N/A	N/A 1	N/A
Hardness as CaCO3, Total	83.79	N/A	N/A	N/A 1	N/A
Vanadiun, Total	0.070	N/A	N/A	N/A I	General Site Runoff
Vanadium (dissolved)	0.010	N/A	N/A	N/A 1	General Site Runoff
rpii-dro	<0.5	N/A	N/A	N/A 1	N/A
I'PH-GRO	<0.5	N/A	N/A	N/A 1	N/A
ff (dissolved)	<0.0002	N/A	N/A	N/A 1	N/A
Fi (dissolved)	<0.002	N/A	N/A	N/A I	N/A
Sn (dissolved)	< 0.005	N/A	N/A	N/A 1	
Se (dissolved)	<0.003	N/A	N/A	N/A I	N/A
Sb (dissolved)	<0.001	N/A	N/A	N/A 1	
Pb (dissolved)	< 0.001	N/A	N/A	N/A 1	N/A
Vi (dissolved)	<0.005	N/A	N/A	N/A 1	
An (dissolved)	0.001	N/A	N/A	N/A I	
Ig (dissolved)	<0.0002	N/A	N/A	N/A 1	
Cu (dissolved)	0.004	N/A	N/A	N/A 1	
Cr (dissolved)	<0.001	N/A	N/A	N/A 1	N/A
Co (dissolved)	<0.0006	N/A	N/A	N/A I	
ld (dissolved)	<0.0003	N/A	N/A	N/A 1	N/A
le (dissolved)	<0.0002	N/A	N/A	N/A 1	
Ba (dissolved)	0.020	N/A	N/A	N/A I	General Site Runoff
s (dissolved)	< 0.003	N/A	N/A	N/A 1	N/A
kg (dissolved)	<0.0001	N/A	N/A	N/A 1	N/A
(dissolved)	0.051	N/A	N/A	N/A 1	General Site Runoff
/In (dissolved)	<0.02	N/A	N/A	N/A 1	
Mg (dissolved)	3.45	N/A	N/A	N/A I	
Fe (dissolved)	< 0.05	N/A	N/A	N/A 1	
Al (dissolved)	0.10	N/A	N/A	N/A 1	

OUTFALL	I. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during event (gallons/minute)	6. Total flow from rain even (gallons)
N/A				•		
parameters in	accordance with the	utfalls Outfall S5, Outfa sampling plan approved ethod of flow measuren	by DEQ.	42 on 1/27/2012 and analyze	ed for applicable Part A	A, B, and C
N/A						

Storm Water Pollution Prevention Plan

STORM WATER POLLUTION PREVENTION PLAN

FOR

POSSUM POINT POWER STATION

19000 Possum Point Road Dumfries, VA 22026

Prepared by:
Dominion Generation
Electric Environmental Services & Projects

August 2011

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Permit Cross Reference

SWPPP Permit Reference	VPDES Permit VA0002071 Storm Water Pollution Prevention Plan (SWPPP) Elements	SWPPP Text Reference
(1)	VA0002071 Part I.G.1.b. Signature and Plan Review. Signature/Location. The plan shall be signed in accordance with Part II, K., and be retained onsite at the facility that generates the storm water discharge in accordance with Part II, B.2. For inactive facilities, the plan may be kept at the nearest office of the permittee.	Page x.
(2)	VA0002071 Part I.G.1.d.(1) Pollution Prevention Team. The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.	Section 1.2
(3)	VA0002071 Part I.G.1.d.(2) Description of Potential Pollutant Sources. The plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials that may potentially be significant pollutant sources. The plan shall include, at a minimum:	Section 4.0
(4)	VA0002071 Part I.G.1.d.(2)(a) Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part I.G.1.d.2.c) have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes and waste waters, locations used for the treatment, filtration, or storage of water supplies, liquid storage tanks, processing areas, and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified;	Section 3.1 and Appendices A, B, & C
(5)	VA0002071 Part I.G.1.d.(2)(b) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3-years prior to the date of submission of an application to be covered under this permit and the present; method	Section 4.0 4.3 & Appendix B&C

	and location of onsite storage or disposal; materials management practices employed to	
	minimize contact of materials with storm water runoff between the time of 3-years prior to the date of the submission of an application to be covered under this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment	
	the storm water receives;	
(6)	VA0002071 Part I.G.1.d.(2)(c) Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility within the 3-year period immediately prior to the date of submission of an application to be covered under this permit. Such list shall be updated as appropriate during the term of the permit;	Section 7.1
(7)	VA0002071 Part I.G.1.d.(2)(d) Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit; and	Section 7.2
(8)	VA0002071 Part I.G.1.d.(2)(e) Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices, and wastewater treatment activities to include sludge drying, storage, application or disposal activities. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, total suspended solids, etc.) of concern shall be identified.	Section 4.1
(9)	VA0002071 Part I.G.1.d.(3) Measures and Controls. The facility covered by this permit shall develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls. a) Good Housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm water discharges. The plan shall describe procedures performed to minimize contact of materials with storm water runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas.	Section 5.0 Section 6.0
×	(1) Fugitive Dust Emissions. The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The permittee shall consider establishing procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.	
	(2) Delivery Vehicles. The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the permittee should consider the following:	
	i. Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and	
	ii. Develop procedures to deal with leakage or spillage from vehicles or	

- containers, and ensure that proper protective measures are available for personnel and environment.
- (3) Fuel Oil Unloading Areas. The plan must describe measures that prevent or minimize contamination of storm water runoff from fuel oil unloading areas. At a minimum the permittee must consider using the following measures, or an equivalent:
- i. Use containment curbs in unloading areas;
- ii. During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up; and
- iii. Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors).
- (4) Chemical Loading/Unloading Areas. The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. Where practicable, chemical loading/unloading areas should be covered, and chemicals should be stored indoors. At a minimum the permittee must consider using the following measures or an equivalent:
- Use containment curbs at chemical loading/unloading areas to contain spills;
 and
- ii. During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.
- (5) Miscellaneous Loading/Unloading Areas. The plan must describe measures that prevent or minimizes the contamination of storm water runoff from loading and unloading areas. The plan may consider covering the loading area, minimizing storm water runon to the loading area by grading, berming, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be contained in existing containment and flow diversion systems.
- (6) Liquid Storage Tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from above ground liquid storage tanks. At a minimum the permittee must consider employing the following measures or an equivalent:
- i. Use protective guards around tanks;
- ii. Use containment curbs;
- iii. Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and
- iv. Use dry cleanup methods.
- (7) Large Bulk Fuel Storage Tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from liquid storage tanks. At a minimum the permittee must consider employing the following measures, or an equivalent:
- i. Comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC); and

- ii. Containment berms.
- (8) The plan must describe measures to reduce the potential for an oil spill, or a chemical spill, or reference the appropriate section of their SPCC plan. At a minimum the structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on a weekly basis. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.
- (9) Oil Bearing Equipment in Switchyards. The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas. The permittee may consider level grades and gravel surfaces to retard flows and limit the spread of spills; collection of storm water runoff in perimeter ditches.
- (10) Residue Hauling Vehicles. All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds must be repaired as soon as practicable.
- (11) Ash Loading Areas. Plant procedures shall be established to reduce and/or control the tracking of ash or residue from ash loading areas for example, where practicable, requirements to clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water.
- (12) Areas Adjacent to Disposal Ponds or Landfills. The plan must describe measures that prevent or minimize contamination of storm water runoff from areas adjacent to disposal ponds or landfills. The permittee must develop procedures to:
- i. Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and
- Reduce ash residue on exit roads leading into and out of residue handling areas.
- (13) Landfills, Scrapyards, Surface Impoundments, Open Dumps, and General Refuse Sites. The plan must address landfills, scrapyards, surface impoundments, open dumps and general refuse sites.
- (14) Maintenance Activities. For vehicle maintenance activities performed on the plant site, the plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The permittee shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practices where the practices would result in the discharge of pollutants to storm water drainage systems, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, minimizing runon/runoff of storm water areas or other equivalent measures.
- (15) Material Storage Areas. The plan must describe measures that prevent or

	minimize contamination of storm water from material storage areas (including areas used for temporary storage of miscellaneous products, and construction materials stored in lay down areas). The permittee may consider flat yard grades, runoff collection in graded swales or ditches, erosion protection measures at steep outfall sites (e.g., concrete chutes, riprap, stilling basins), covering lay down areas, storing the materials indoors, covering the material with a temporary covering made of polyethylene, polyurethane, polypropylene, or hypalon. Storm water runon may be minimized by constructing an enclosure or building a berm around the area.	
(10)	VA0002071 Part I.G.1.d.(3)(b) Preventive Maintenance.	Section 5.3
	A preventive maintenance program shall involve: timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins); inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures which could result in discharges of pollutants to surface waters; and appropriate maintenance of such equipment and systems.	8 7
(11)	VA0002071 Part I.G.1.d.(3)(c) Spill Prevention and Response Procedures. Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.	Section 2.2
(12)	VA0002071 Part I.G.1.d.(3)(d) Inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.	Section 3.4, 5.2.3, & 7.3
(13)	VA0002071 Part I.G.1.d.(3)(e) Employee Training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.	Section 5.2.1
(14)	VA0002071 Part I.G.1.d.(3)(f) Recordkeeping and Internal Reporting Procedures. A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.	Section 7.0
(15)	VA0002071 Part 1.G.1.d.(3)(g) Sediment and Erosion Control. The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil crosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.	Section 4.5
(16)	VA0002071 Part I.G.1.d.(3)(h) Management of Runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water	Section 5.0

(17)	discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices; reuse of collected storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices and wet detention/retention devices; or other equivalent measures. VA0002071 Part I.G.I.d.(4)/Comprehensive Site Compliance Evaluation. Personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall include the following: a) Areas contributing to a storm water discharge associated with industrial activity such as material storage, handling, and disposal activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made; b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part I.G.1.d.(2) and pollution prevention measures and controls ident	Section 3.5, Section 7.4, & Appendix E
(18)	VA0002071 Part I.G.2. General Storm Water Conditions a. Quarterly Visual Examination of Storm Water Quality. Unless another more frequent schedule is established elsewhere within this permit, the permittee shall	Section 3.3, Section 7.2,

_	Augu	st 2011
	perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.	& Appendix F
b.		
c.	Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snowmelt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settle solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution) and probable sources of any observed storm water contamination.	
d.	When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the size of the drainage area (in square fect) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40-65 percent), or high (above 65 percent) shall be provided in the plan.	
e.	When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of	

the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample

impracticable (drought, extended frozen conditions, etc.).

VA0002071 Part I.G.2.b. Prohibition of Non-storm Water Discharges.

(19)

Section 3.2.1



	Except as provided in this paragraph or elsewhere in this permit, all storm water	& Appendix
	discharges covered by this permit shall be composed entirely of storm water. The	H
	following non-storm water discharges are authorized by this permit provided the non-	
- 8	storm water component of the discharge is in compliance with this permit: discharges	
	from fire fighting activities; fire hydrant flushings; potable water sources including	1
	waterline flushings; uncontaminated compressor condensate; irrigation drainage; lawn	8
	watering; routine external building wash down that does not use detergents or other	
	compounds; pavement wash waters where spills or leaks of toxic or hazardous materials	
	have not occurred (unless all spilled material has been removed) and where detergents	
	are not used; air conditioning condensate; uncontaminated springs; uncontaminated	
	ground water; and foundation or footing drains where flows are not contaminated with	
	process materials such as solvents	
	All other non-storm water discharges must be addressed within and in compliance with	
	this VPDES permit.	

PLAN REVIEW AND CERTIFICATION

VA0002071 Part I.G.1.b. Signature and Plan Review (SWPPP Cross Reference #1)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Signature:	Aff Chaffel	Date 11-15-11
Printed Name:	Jeffey Q. Heffelman	The second secon
Title:	Director - F&H Station	

1.0 FACILITY INFORMATION

1.1 Facility Description - General

Possum Point Power Station is a gas and oil fired steam electric generating station. The principle wastewater discharges enter Quantico Creek. An oil dock and two cooling water intake structures originate from the Virginia shoreline of the Potomac River and extend into the Maryland waters of the Potomac River. The station is approximately thirty-five miles south of Washington D.C. and twenty-two miles from Fredericksburg, Virginia. The facility's latitude is 38° 32' 12.2" and longitude is 77° 16' 37.8". A Topographic Map of the Facility is included in Appendix A.

Driving Direction: To reach Possum Point Power Station from Interstate 95, take the Dumfries – Manassas exit at Route 234 south. Take a right at the first traffic light on Route 1 south. Turn left off Route 1 (0.5 miles) onto Possum Point Road. The Power Station is located 4 miles off Route 1 at the end of Possum Point Road.

1.2 Facility Owner and Operator

Facility Operator:	Dominion Generation	Owner Name:	Virginia Electric and Power Co.
Address:	19000 Possum Point Road,	Address:	5000 Dominion Blvd.
	Dumfries, VA 22026		Glen Allen, VA 23060
Telephone:	(703) 441-3813	Telephone:	804-273-3800

2.0 Contacts & Team Members

2.1 Pollution Prevention Team

VA0002071 Part I.G.1.d.(1) Pollution Prevention Team (SWPPP Cross Reference #2)

Name	Title	Contact Number
Jeffrey C. Heffelman	Director - F&H Station (1)	(703) 441-3880
Jeffrey R. Marcell	Environmental Supervisor (2)	(703) 441-3813
Keith Homza	Station Chemist III (3)	(703) 441-3814
(24 Hour Coverage)	Shift Supervisor (5)	(703) 441-3832
Rick Woolard	Environmental Specialist III (4)	(804) 273-2991

- (1) RESPONSIBLE PERSON FOR OVERALL COORDINATION AND DEVELOPMENT.
- (2) RESPONSIBLE PERSON FOR IMPLEMENTATION, TRAINING, AND REVISIONS TO PLAN.
- (3) RESPONSIBLE PERSON FOR INSPECTION AND PLAN DEVELOPMENT.
- (4) RESPOSIBLE PERSON FOR PERMIT INTERPRETATION FOR COORDINATION OF CORPORATE ENVIRONMENTAL AND STATION REQUIREMENTS.
- (5) DAILY PLANT OPERATIONS.

2.2 SPILL PREVENTION AND RESPONSE

VA0002071 Part I.G.1.d.(3)(c) Spill Prevention and Response Procedures (SWPPP Cross Reference # 11)

The Station's Director, O&M Manager(s), and Environmental Supervisor are on call 24hrs a day 7days a week. The Station's Operator(s) are to contact any of the above individuals in the event of a spill and/or leak

Spill response procedures for petroleum products are referenced in the SPCC/ODCP/FRP plans. For all other spills Possum Point's Emergency & Evacuation Procedures are located in the Safety Coordinator's Office and available electronically in the Operation's Folder. Spill history is provide in Section 7.1 of this plan.

2.3 POTW City Notification Requirement

N/A

Possum Point Power Station discharges their sanitary waste to Prince William County Service Authority, specifically H.L. Mooney Waste Water Treatment Plant. (Note back ground history email in Appendix J).

3.0 SAMPLING / MONITORING AND INSPECTION REQUIREMENTS

3.1 Summary of Outfalls

VA0002071 Part I.G.1.d.(2)(a) Drainage. (SWPPP Cross Reference # 4)

Discharge Point S5:

Discharges to Potomac River. Receives runoff from approximately 3.9 acres between Unit #5's Cooling Towers. The area is approximately 50% impervious buildings and 50% pervious grass with packed gravel. Outfall discharges to the mouth of Quantico Creek near the southeast corner of Unit #5 Cooling Tower A.

Discharge Point S61:

Discharges to Quantico Creek. Receives runoff from approximately 2.8 acres from the main entrance way to the plant, the gravel area west of the "Old" Combustion Turbine buildings, a portion of the roadway leading from the "Old" Combustion Turbines to the northwest end of the 115 kV Switchyard, grassy area and railway located west of the 115 kV Switchyard, and the west end of the maintenance shop including the west ½ of the Maintenance Shop roof. The area is estimated to be 60% impervious (buildings, roads), and 40% pervious (gravel, grass, woods, riparian buffer) areas.

Discharge Point S42:

Discharges to Potomac River. Receives runoff from approximately 6.6 acres, which collects storm water through multiple drop inlets located around the perimeter of Unit #5 boiler and dust collector. The area is estimated to be 20% impervious (buildings, road) and 80% pervious (gravel, grass). One of the drop inlets receives drainage conveyed via ditch from the "Old" Combustion Turbines' oily-water separator, used as tertiary containment.

Discharge Point S31:

Discharges to Potomac River. Cooling Tower Mist (Allowable Non-Storm Water) Area north end of Unit #5 Cooling Tower B, includes 2 drop inlets that drain the 0.15 acres. Area consist of 10% Pervious (gravel & grass) and 90% impervious (road).

Discharge Point S36:

Area is located that around Units 1&2 stacks and the road under Units 3&4 Precipitators. This drainage area includes two drop inlet, one located under the Units 3&4 Precipitator and the other on the roof of Units 3&4 Screen Wells. The area consist of approximately 0.11 acres that are 30% pervious (gravel) and 70% impervious (road, roof).

Discharge Point S37:

Receives runoff from the area around Administration Building which is mainly vehicle parking, roof drainage from the Admin. Bldg and eastern ½ of the Maintenance Shop. The area consist of approximate 2.0 acres that are 40% pervious (grass and gravel) and 60% impervious (parking lot, roads, and roof tops).

Discharge Point S49:

Discharges to Potomac River and collects drainage from area east Unit #5 Boiler and north of Oil Dock Foam House. This area includes one drop inlet and consist of approximately 0.15 acres that are 50% pervious (gravel) and 50% impervious (roof).

Discharge Point S77:

Discharges to Potomac River and collects drainage conveyed through a concrete pipe from the area surrounding the eastern edge of the No. 6 fuel oil pipe bench leading north to the Unit #5 Transfer Pump House. This area is approximately 0.14 acres that are 90% pervious (river bank, gravel) and 10% impervious.

Discharge Point S78, S79, S80, & S94 (MD): Discharges to Potomac River. All four outfalls are concrete flumes that drain the exterior berm of the Heavy Oil Tanks' containment. These areas' acreage are (0.61, 0.56, 0.36, and 0.23) respectively. The areas are 100% pervious (vegetative slope) with no industrial activity.

Discharge Point S86:

Discharges to Quantico Creek. Area collects drainage in ditches on both sides of the Rail Road, the ditches along Rail Road industrial storm water the from west of the 230 kV Switchyard, all of the M&R Station, west of the light oil containment tanks, the parking lot "Old" Combustion Turbines, and the Main Entrance. This area is approximately 34.6 acres and estimated 95% pervious (gravel, grass, vegetated slopes) and 5 % impervious (road, parking lot).

Discharge Point S95

Discharges to Potomac River. Area consist of multiple ditches and graded surfaces that channel to a concrete plume that discharges to the Potomac River. This area is approximately 2.6 acres which is estimated 90% pervious (gravel, grass, vegetated slopes) and 10% impervious (road, parking lot).

Discharge Point S107:

Discharges to Quantico Creek. Collects storm water from the berm of Delta Pond via two drop inlets. This outfall is designed to collect groundwater infiltration from the Delta Pond's berm for stabilization. This outfall was sampled to characterize the groundwater discharge. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

3.2 Non-Storm Water Discharges

3.2.1 Certification of Non-Storm Water Discharges

VA0002071 Part I.G.2.b Prohidition of Non-storm Water Discharges (SWPPP Cross Reference #19)

The non-storm water discharge certification is included in the Appendix H.

3.2.2 Allowable Non-Storm Water Discharges

VA0002071 Part I.G.2.b Prohidition of Non-storm Water Discharges (SWPPP Cross Reference #19)

This facility is permitted by the above referenced permit in Part I.G.2.b., page 28 of 29, for the following "Allowable Nonstorm Water Discharges". Please refer to Appendix C for the allowable sources drainage locations and Section 5.0 of this plan for various storm water controls.

- Discharge from fire fighting activities;
- Fire Hydrant Flushing;
- Potable Water Sources including waterline flushings;
- Uncontaminated compressor condensate;
- Irrigation drainage;
- Lawn Watering;
- Routine external building wash down which does not use detergents or other compounds;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- Air conditioning condensate;
- Uncontaminated springs;
- Uncontaminated groundwater;
- Foundation or footing where flows are not contaminated with process materials such as solvents;
- · Incidental windblown mist from cooling towers, and
- Demineralized water from storage tanks "and trucks".

The various storm water controls (structural and non-structural) for this facility are discussed in Section 5.0 of this plan.

Possum Point Power Station's discharges are permitted by VA DEQ as Individual Industrial Major VPDES permit. The VPDES permit No. VA0002071 combines both industrial wastewater and storm water discharges. The following are the VPDES permitted wastewater outfalls:

<u>Discharge Point 001 & 002</u>: Combined outfalls that discharge to Quantico Creek. The discharges are Condenser Cooling Water & Cooling Tower Blowdown and receive flow from internal Discharge Outfalls 201 & 202:

<u>Discharge Point 201</u>: Cooling Tower Blowdown for Unit 5. <u>Discharge Point 202</u>: Cooling Tower Blowdown for Unit 6.

Discharge Point 003: Condenser Cooling Water for Unit 4 that discharges to Quantico Creek.

Discharge Point 004: Low Volume Waste Settling Pond that discharges to the mouth of Quantico Creek.

Discharge Point 005: Ash Pond E to Quantico Creek. Receives flows from internal Outfalls 501 & 502:

Discharge Point 501: Oil Waste Treatment Basin.

Discharge Point 502: Mctals Cleaning Waste Treatment Facility.

Discharge Point 007: Units 1-4 Intake Screen Backwash to Potomac River.

Discharge Point 008: Intake Screenwell Freeze Protection to Potomac River.

3.3 Monitoring Requirements

VA0002071 Part I.G.2.(a) Quarterly Visual Examination of Storm Water Quality (SWPPP Cross Reference #18)

The Quarterly Visual Monitoring is required to be conducted periods of (January – March) (April - June) (July – September) (October – December). See the above permit condition for the details on qualifying rain events and adverse weather conditions. An example of Visual Inspection forms are provided in Appendix E.

QUARTERLY VISUAL MONITORING PARAMETERS OF NPDES PERMIT

Discharge Characteristics	Monitoring Frequency	NDPES Permit # Monitoring Location
Color	Quarterly	Outfalls S5, S61, S42
Odor	Quarterly	Outfalls S5, S61, S42
Clarity	Quarterly	Outfalls S5, S61, S42
Floating Solids	Quarterly	Outfalls S5, S61, S42
Settle Solids	Quarterly	Outfalls S5, S61, S42
Suspended	Quarterly	Outfalls S5, S61, S42
Foam	Quarterly	Outfalls S5, S61, S42
Oil Sheen	Quarterly	Outfalls S5, S61, S42
Other Obvious Indicators	Quarterly	Outfalls S5, S61, S42

3.4 SWPPP Inspection Requirements

VA0002071 Part I.G.1.d.(3)(d) Inspections (SWPPP Cross Reference #12)

The above referenced permit condition requires the identified storm water exposed items identified in this plan to be inspected at least quarterly. The suggested schedule; (January – March), (April – June), (July – September), and (October – December). The facility petroleum items will be inspected in accordance with the SPCC requirements, please refer to the SPCC plan. (Please see section 7.3 of this plan for Storm Water inspection documentation and Appendix E of this plan for blank Storm Water inspection forms.)

3.5 Comprehensive Site Compliance Evaluation

VA0002071 Part I.G.1.d.(4) Comprehensive Site Compliance Evaluation (SWPPP Cross Reference #17)

The Storm Water Pollution Prevention Plan shall be reviewed and updated on an Annual basis and can coincide with one of the quarterly inspections. For records of annual reviews, see section 7.4 and/or Appendix D.

Note: The permit requires the SWPPP to be amended within 14 days of the Annual evaluation and 12 weeks to implement the Action Items unless DEQ approves a written time extension request.

4.0 POTENTIAL POLLUTANT SOURCES

VA0002071 Part I.G.1.d.(2) Description of Potential Pollutant Sources. (SWPPP Cross Reference #3)

A SWPPP evaluation and associated SPCC Plan identify the following equipment and areas that could potentially impact storm water as a result of spills during oil or chemical transfer operations. The likelihood is low and is primarily associated with storm drain vicinity to the equipment/operation. Please refer to Appendix B & C maps for locations and drainage patterns.

4.1 SUMMARY OF POTENTIAL POLLUTANT SOURCES

Facility Area	Activity	Pollutant(s) or Pollutant Parameter(s)
Barge Unloading Area	Barge Off Loading	POLLUTANT: Petroleum DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Laydown Area	Bulk Equipment Unloading and Storage (Temporary / Outages)	POLLUTANT: Metals DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: Yes
Metal Dumpster	Storage	POLLUTANT: Metal DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Sand and Gravel Stock Pile	Unloading and Storage	POLLUTANT: Sand and Gravel DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
General Refuse Areas (3 Locations)	Storage	POLLUTANT: General Refuse DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Oil Dock Fire Foam House	Unloading and Storage	POLLUTANT: Fire Foam DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Possum Point C.T. False Start Drain Tank (Old C.T.s)	Storage and Unloading	POLLUTANT: Petroleum DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
		POLLUTANT: DIRECT EXPOSURE: POTENTIAL TO DISCHARGE:

4.2 Site Bulk Chemicals/ Materials

VA0002071 Part I.G.1.d.(2)(b) Inventory of Exposed Materials (SWPPP Cross Reference #5)

Chemical / Material Storage			
Material Exposure (Map Key ID "S#")	Storage Capacity (Gallons)	BMPs	
General Refuse Dumpster Map Key (S1, S2 & S3)	NA	Equipped with lids and/or tarps, Drains to Outfall S42 Outfall S95, and S85.	
Laydown Area Map Key (S4)	NA	Graded with rock - Drains to Outfall S86.	
Metal Dumpster Map Key (S5)	NA	Equipped with lids and or tarps - Drains to Outfal S95.	
Sand and Gravel Stock Pile Map Key (S6)	Varies	Equipped with concrete pad and covered with tarps - Drains to Outfall S5.	
Possum Point C.T. False Start Drain Tank (Old C.T.s) Map Key (S7)	500	Double walled tank, slope concrete pad curbed or three sides. Drain is protected with Active-X membrane. Drains to Outfall S42.	
51	8.1 (1.1)		
	65E	9	
	1900-01		

Chemical Containing Equipment		
Equipment / Material (Map Key ID "S#")	Storage Capacity (Gallons)	BMPs
Unit 5A Cooling Towers Map Key (S8)	Flow Through 330,000 gpm	- Drains to Outfalls S5. Concrete Basin.
Unit 5B Cooling Towers Map Key (S9)	Flow Through 330,000 gpm	- Drains to Outfalls S5 and Outfall S31. Concrete Basin.
		a

BMPs d inside of building - Drains to Outfall S46.
inside of building - Drains to Outfall S46.
Pans and pads under the connection. The rutilizes vacuum pressure. — Outfall S86
Pans and pads under the connection. The rutilizes vacuum pressure. — A released be to the dock area over the Potomac, which is protected by shoreline boom.
n Pans and pads under the connection. The rutilizes vacuum pressure. — A released be to the dock area over the Potomac. Drain is equipped with Active-X prane material. Outfall S42.
Portable Restrooms are strategically placed in away for storm drain inlets and ditches. The n has developed a written procedure for ging Portable Restrooms.
P

4.3 Site Bulk Oil

The oil related tables, please refer to the SPCC/ODCP/FRP Plans.

4.4 Sediment & Erosion

VA0002071 Part I.G.1.d.(3)(h) Sediment and Erosion Control (SWPPP Cross Reference # 15)

4.4.1 Sediment and Erosion Control

The Station utilizes curbs, concrete ditches, rocks and grates/inlets to control storm water runoff. Some of the grates/inlets are surrounded with hay bales and silt fences. Approximately 22% of the property is impervious surfaces such as roof tops and paved parking lots and roads. The other 78% are previous with ponds, graveled and some grassy areas. No evidence of serve erosion is currently present.

4.5.2 Construction Erosion & Sediment Control

Appendix G is reserved for Erosion Control and Sediment Plan insertion in the event of construction activity at the station. Such plans are required for Construction Storm Water Permits and developed with a specific focus on site topography, drainage patterns, soils, ground cover, and adjacent runoff areas.

5.0 STORM WATER CONTROLS

VA0002071 Part I.G.1.d.(3)(h) Management of Runoff (SWPPP Cross Reference #16)

Storm water management controls appropriate for the Station can be summarized as follows:

CONTROLS
*
Drop in-let, silt-traps, rocks, gravel, and curbing.
Secondary containment as applicable, drainage system, written
procedures, personnel attendance during transfers, spill kits, and
inspections.
Secondary containment, drainage system, shutoff valves,
loading/unloading procedures, inspection, and spill kits.
Secondary containment, written procedures, drainage system, spill
kits, inspections, and deployment of oil boom.

5.1 Structural BMPs

Refer to Section 4.3, 4.4 and 4.5 for structural BMPs in place at this Station.

5.2 Non-Structural BMPs

The Station has Operating Procedures (OP) that are related to storm water contact management. They reduce the potential for storm water contact due to equipment failure or operational losses. The associated OPs are listed in section 5.2.1:

5.2.1 Employee Training

VA0002071 Part I.G.1.d.(3)(e) Employee Training (SWPPP Cross Reference #13)

The positions noted (2) in the Pollution Prevention Team in Section 2.1 of this plan are responsible for providing the storm water training. The Station has the following training that encompasses storm water management:

- ➤ New Employee Orientation
- ➤ Safety Inspections
- ➤ Hazard Communication Program
- > Annual Storm Water Pollution Prevention

The Station has developed Operational Procedures (OP) associated with storm water and used as training. Copies of the OPs are maintained in the Station's internal computer network under the Operation's Folder for product deliveries and available upon request.

Material Safety Data Sheets (MSDS) are also utilized as part of training to ensure that employees understand the nature of materials that could cause equipment leaks. Refer to Station's files for copies of the MSDS.

5.2.2 Good Housekeeping

VA0002071 Part I.G.1.d.(3)(a) Good Housekeeping (SWPPP Cross Reference #)

Section 6.0 of this plan includes the details for each Good Housekeeping requirement.

5.2.3 Routine Facility Inspections

VA0002071 Part I.G.1.d.(3)(d) Inspections (SWPPP Cross Reference #12)

Routine facility inspections are comprehensive in scope, refer to Appendix E of this plan for the Storm Water Inspection and SPCC/ODCP/FRP plan for the Oil Inspection forms. The inspections include:

- > Storm Water: Monthly Inspection and Annual Evaluation
- > SPCC Plan form "Daily, Weekly, and Monthly Oil Inspection."

5.2.4 Spill Prevention and Response Procedures

VA0002071 Part I.G.1.d.(3)(c) Spill Prevention and Response Procedures (SWPPP Cross Reference # 11)

Please refer to Section 2.2 of this and plan and the SPCC/OCDP/FRP plans for general spill response procedures.

5.3 BMP Maintenance

VA0002071 Part I.G.1.d.(3)(b) Preventive Maintenance (SWPPP Cross Reference #10)

Based upon facility evaluation, Section 4.0 (Potential Pollutant Sources) identified those types and locations of equipment that can potential impact storm water as a result of operational or equipment failure or human error. The continuing structural or non-structural Best Management Practices (BMPs) that are currently utilized, and will continue to be utilized, until planned BMP feasibility studies are completed for possible future construction and/or implementation. Refer also to Section 5.5.

5.4 BMPs Planned for Consideration

BMPs planned for consideration at this facility are limited to those identified during periodic evaluations. Storm water detention or retention is included as one type of structural BMP under consideration and will be continually reviewed for both contained and uncontained equipment. Refer to Appendix E, Annual Compliance Evaluation for the most recent BMP recommendations.

New BMP Candidates Since the Last Site Evaluation:	Responsible Person	Status
	3	
	3	55
Ti.		
		_

6.0 GOOD HOUSEKEEPING MEASURES

VA0002071 Part I.G.1.d. (3)(a) Good Housekeeping (SWPPP Cross Reference #9)

6.1 Fugitive Dust Emissions

Wet suppression is implemented on as needed basis.

6.2 Delivery Vehicles

Bulk chemicals come in closed container trucks. Facility has safe fill and shutdown procedures that are to be used in transfer process and posted at each unloading area. Delivery of petroleum products is handled in accordance with the SPCC Plan.

6.3 Fuel Oil Unloading Areas

Measures to prevent or minimize contamination of storm water runoff from fuel oil unloading areas are described in the SPCC Plan.

6.4 Chemical Loading/Unloading Areas

Operations is notified upon arrival of bulk shipment. Station personnel trained in spill prevention response are available during unloading. Most of the chemicals used at the Station are stored indoors. Chemical unloading areas are equipped with containment and drains to handle any spill. Safe fill and shutdown procedures are used during unloading events.

6.5 Miscellaneous Loading/Unloading Areas

Various structural Best Management practices such as berming, curbing, containment, and written procedures are utilized for both chemical and petroleum unloading areas.

6.6 Small Liquid Storage Tanks

Bulk chemical spills from storage tanks are contained, cleaned up, and/or routed to the Station's Low Volume Settling Ponds or Oil Retention Pond. Transfer facilities are equipped with spill and overflow protection. (e.g. containment curbing, drip pans, drip diapers, and/or other containment devices). Trained personnel handle small clean-ups and contractors are hired to handle large clean-ups.

6.7 Large Bulk Fuel Storage Tanks

Refer to Section 4.4 and the facility's SPCC plan maintained under separate cover.

6.8 Spill Reduction Measures

Refer to Section 5.0 and the facility's SPCC plan maintained under separate cover.

6.9 Oil Bearing Equipment in Switchyards

Refer to Section 4.4 and the facility's SPCC plan maintained under separate cover.

6.10 Residue Hauling Vehicles

The Station does not routinely haul coal or coal by-product. The Station ensures all residue hauling vehicles will be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds will be repaired as soon as practicable.

6.11 Ash Loading Areas

No longer applicable to Possum Point Power Station, this facility no longer burns coal. The Oil Ash from Unit 5 is vacuumed into a sealed container and transported to an industrial landfill.

6.12 Areas Adjacent to Disposal Ponds or Landfills

When this facility operated via coal, the ash was sluiced to a settling pond, therefore ash hauling/tracking is not an issue for this facility. The integrity of Ash Pond's berms and banks are periodically inspected for erosion issues. For vehicle tracking management, please refer to section 6.10 above.

6.13 Landfills, Scrapyards, Surface Impoundments, Open Dumps, General Refuse Sites

The General Refuse dumpsters are equipped with lids to prevent rainwater. Scrap metal is placed in dedicated metal debris dumpster for disposal. During construction activities, large pieces of equipment are stored in a Laydown area. Oily rags and absorbents are placed in the dedicated Oily Debris dumpster equipped with lids.

6.14 Maintenance Activities

Vehicle and Equipment Storage Areas:

Vehicles awaiting maintenance are stored in Coal Yard Service Building.

Fueling Areas:

Measures to prevent or minimize contamination of storm water runoff from fueling areas are described in the SPCC Plan.

Vehicle and Equipment Cleaning Areas:

Vehicle washing is limited to drains that connect to Wastewater Outfall 004. (No Detergents are used)

Vehicle and Equipment Maintenance Areas:

On-road vehicle and heavy equipment maintenance is performed in the Coal Yard Service building or under cover on the East side of the Unit 5 Sandfilter Building.

6.15 Material Storage Areas

Materials are placed in covered storage areas or, if stored outdoors, in closed containers or under cover. Storage units for all materials are maintained in good condition.

7.0 DOCUMENTATION

VA0002071 Part I.G.1.d.(3)(f) Recordkeeping and Internal Reporting Procedures (SWPPP Cross Reference #14)

The following subsections represent the various methods of documentation.

7.1 Spills and Leaks

VA0002071 Part I.G.1.d.(2)(c) Spills and Leaks. (SWPPP Cross Reference #6)

The reportable spills list is provided in Appendix I of this plan and locations are referenced on the Appendix C drawing.

7.2 Storm Water Monitoring Requirements

VA0002071 Part I.G.1.d.(2)(d) Sampling Data (SWPPP Cross Reference #7)

Monitoring records are maintained in Station's files and available upon request, an example of monitoring forms is Appendix E. A summary of the monitoring data is conducted during the Annual Evaluation and is provided in Appendix D.

7.3 Site Inspections

VA0002071 Part I.G.1.d.(3)(d) Inspections (SWPPP Cross Reference #12)

Inspection forms are in Appendix E and records are maintained in Station's files and available upon request.

7.4 Annual Evaluation

VA0002071 Part I.G.1.d.(4) Comprehensive Site Compliance Evaluation (SWPPP Cross Reference #17)

Refer to Appendix D for evaluation summary forms and reports.

ANNUAL COMPLIANCE EVALUATION CERTIFICATION

Date of Site Visit	Purpose
July 16 &17, 2008	Annual Evaluation
August 11 & 12, 2009	Annual Evaluation
August 17 & 18, 2010	Annual Evaluation
August 3, 2011	Annual Evaluation
	7.

7.5 Goals & Objectives

The storm water pollution prevention plan (SWPPP) has been developed as required by the Station's storm water discharge permit and to incorporate good engineering practices. This SWPPP describes this Station, its operations, identifies potential sources of storm water pollution at the facility, recommends appropriate best management practices (BMPs) or pollution control measures to reduce the discharge of pollutants in storm water runoff, and provides for periodic review of this SWPPP. It is the objective of this program to improve the quality of surface waters by reducing the amount of pollutants potentially contained in the storm water runoff being discharged.

7.6 Record of Review

Record of Reviews (SWPPP Permit Reference #13)				
Date of Inspection ¹	Date Minor SWPPP Revisions Completed ²	Date of Substantial BMP Modification 3,4	Date of Comprehensive Site Evaluation Summary Report 5	Reason for Amendment
July 16 & 17, 2008			July 17, 2008	Annual Evaluation
August 11 & 12, 2009			August 12, 2009	Annual Evaluation
August 17 & 18, 2010			August 18, 2010	Annual Evaluation
August 3, 2011			November 14, 2011	Annual Evaluation
			· · · · · · · · · · · · · · · · · ·	1111
11971-01		-		

¹ A Station inspection must be completed by qualified personnel familiar with Station operations in accordance with State and Federal SWPPP regulations.

² The SWPPP shall be modified as necessary to include minor changes in SWPPP text, Station controls or BMPs. Revision to the SWPPP must be completed within two weeks following the inspection, unless permission for a later date is granted in writing by the State NPDES authority.

³ If substantial SWPPP change is necessary including significant modification of existing BMPs or if the addition of new BMPs is necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than 12 weeks after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the State NPDES authority. Refer to the Action Item Schedule on the next page.

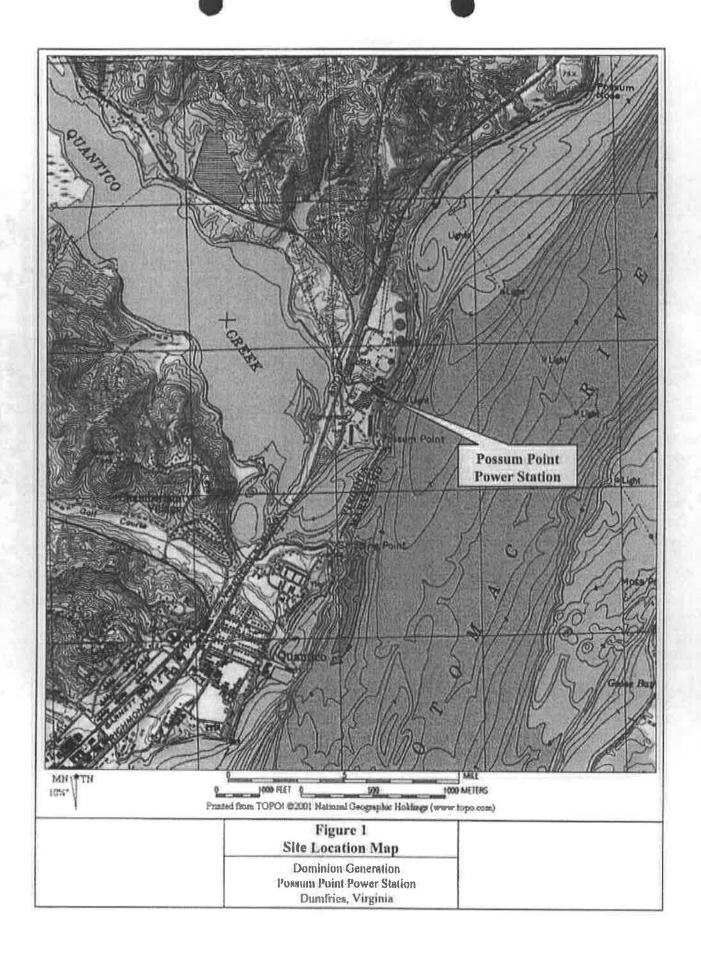
⁴ The permittee shall amend the SWPPP whenever: (1) there is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of

pollutants from the facility; (2) during inspections, monitoring, or investigations by facility personnel or by local, state, or federal officials, it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified.

⁵ A report summarizing the scope of the inspection name(s) of personnel making the inspection, date(s) of the inspection, and major observations relating to the implementation of the SWPPP, and actions taken in accordance with the NPDES permit shall be made and retained as part of the SWPPP for at least five years from the date of the inspections.

Appendix A

Topographic Site Map and Site Vicinity Map (SWPPP Permit Reference #4)

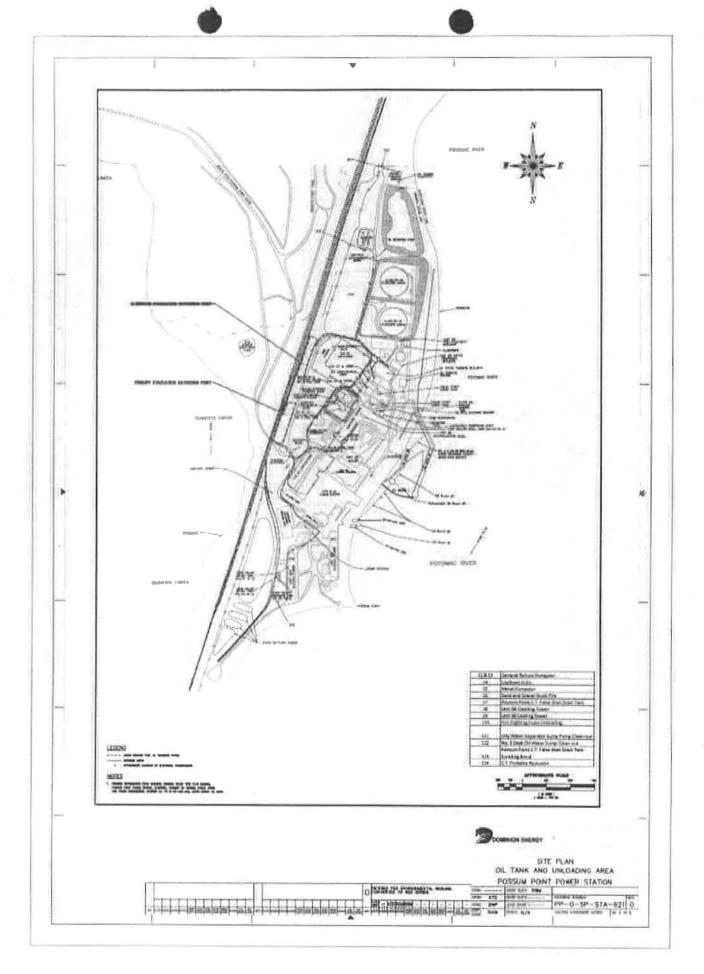


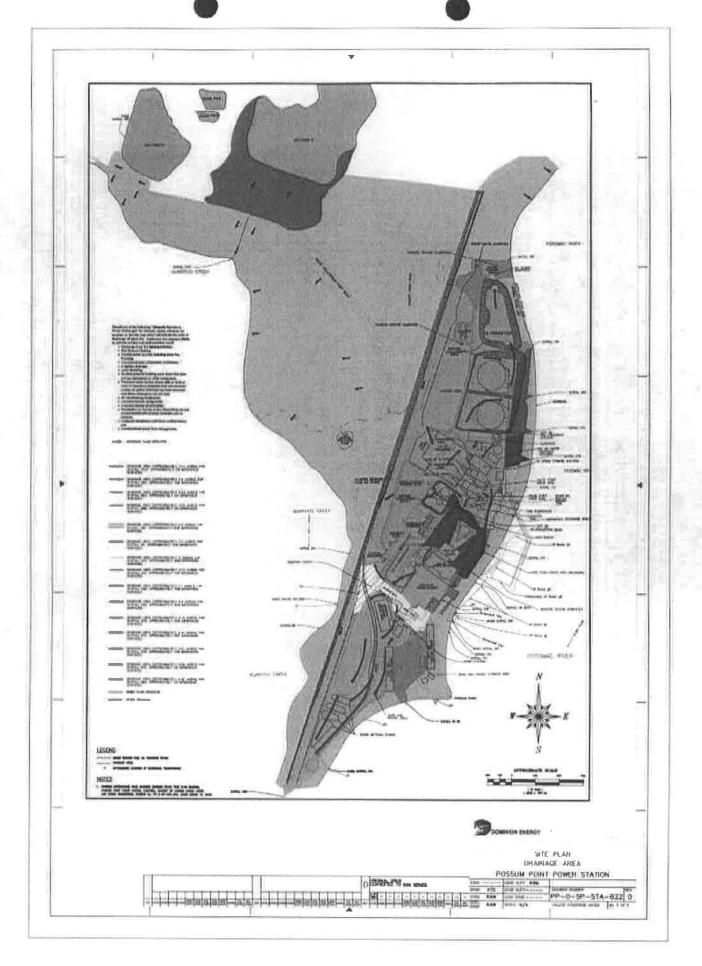
Appendix B

Site Plan (SWPPP Permit Reference #4 & 5)

Appendix C

Storm Water Drainage Areas (SWPPP Permit Reference # 4 & 5)





Appendix D

Annual Compliance Evaluation Summary Report (SWPPP Permit Reference #17)

STORM WATER POLLUTION PREVENTION PLAN ANNUAL SITE COMPLIANCE EVALUATION

LOCATION: Possum Point Power Station

DATE OF ANNUAL EVALUATION: EVALUATION METHOD: Comprehensive SWPPP Checklist EVALUATION TEAM:

SCOPE OF SITE COMPLIANCE EVALUATION:

SUMMARY OF EVALUTION	YES or NO
Answer the following questions with YES or NO	
Inspection Made of Each Material Exposed to Storm Water?	
Inspection Made of Each Activity / Unloading Area Exposed to Storm Water?	
Inspection Made for Contaminants on the Ground?	
Inspection Made for Leaks from Equipment or Containers?	
Inspection Made for Vehicle Tracking Impacts?	
Inspection Made for Materials Blowing from Areas?	
Inspection Made of Pollutants in Drainage Ways?	
Inspection Made of Monitoring and Inspection Records?	
BMPs Identified in the SWPPP Were Checked to See if Used?	
Were the Locations of Outfalls Inspected?	
Site Map(s) Reviewed?	

COMPLIANCE EVALUATION SUMMARY REPORT:

EVALUATION OF OUTFALLS:	TOTALS
Storm Water Outfalls:	
Process/Allowable Non-Storm Water Outfalls:	
Compliance Action Item Summary:	YES or NO
Any evidence of Leaks or Spills that may have reached offsite Surface Water?	
Any evidence of exposure sources contacting Storm Water?	
Is Written SWPPP Binder Updates Needed?	11721
Does the Site Map(s) require revisions?	
Are Additional BMPs needed or requiring maintenance?	
Incidents of Non-Compliance of Permit Discharge Limits?	
Were any issues of Non-compliance found?	
Was any incidents noted that require Notification?	

SWPPP TEXT OBSERVATIONS - Possum Point Power Station SWPPP

Corresponding SWPPP Section	REQUIRED SWPPP CONTENTS:	Revision Required (Yes or No)
Page xi	Management Approval Certification	
Section 1.0	Description of Station & its activities	
Section 2.1	Pollution Prevention Team	
Section 2.2	Spill Response Procedures	
Sections 3.1 & 3.2	Outfall Descriptions	
Section 3.2	Non-Storm Water Evaluation Certification	
Section 3.2	Allowable Discharge Descriptions	
Sections 3.3, 3.4 & 3.5	Monitoring and/or Inspections descriptions	
Sections 4.0	List of Exposed Materials and/or Activities	
Sections 4.2 & 5.0	List of Structural BMPs	
Section 4.4	Construction, Sediment, or Erosion Control discussion	
Section 5.2.1	Storm Water Training and Schedules	
Section 6.0	Non-Structural BMPs - Good Housekeeping:	
Section 6.1	Dust Control Equipment Areas	
Section 6.2	Delivery Vehicle	
Section 6.3	Fuel Oil Unloading Areas	
Section 6.4	Chemical Unloading Areas	
Section 6.5	Miscellaneous Loading / Unloading	
Sections 6.6 & 6.7	Small and Large Storage Tank Areas	
Section 6.8	Spill Reduction Measures	
Section 6.9	Oil Filled Electrical Equipment Arcas, e.g., Transformers	
Section 6.10	Residue Hauling Vehicles	
Section 6.11	Ash Handling Areas & Hauling Vehicles	
Section 6.12	Areas Adjacent to Ponds/Basins/Impoundments	
Section 6.13	Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse	
Section 6.14	Maintenance Activities	
Section 6.15	Material Storage Areas	
	19	
Section 7.0	SWPPP Documentation:	
Section 7.1	Reportable Spills	
Section 7.2 & 7.3	Inspections and Monitoring Documentation Locations	
Section 7.4	Annual Evaluation Documentation	
	SWPPP Map Elements – Summary:	ļ
·	Updated Outfall Locations & Numbers	
Appendices A, B & C	Topographical Location & Surface Water Body Names	
Appendices A, B & C	Drainage Direction by Site Area	
Appendices A, B & C	Activity Locations Exposed to Storm Water	
Appendices A, B & C	Equipment Locations Exposed to Storm Water	
Appendices A, B & C	Materials Potentially Exposed to Storm Water	
Appendices A, B & C	Spill or Leak Areas - Past or Potential	

SITE OBSERVATIONS – Possum Point Power Station Site Visit (Records, Site Conditions, Structural / Non-Structural BMPs)

NOTE: List any test methods used in evaluating Nonstorm Water Discharges and the results.

SUMMARY DISCHARGE MONITORING DATA:

Visually Monitoring Reports:

Inspections Records:

Other Observations:

SWPPP ACTION ITEMS - Possum Point Power Station

ACTION ITEM IMPLEMENTATION SCHEDULE				
Action Item	1	Responsible Completion Person Deadline		Actual Date Completed
I,	W//			
2.				
3.				
4.				
5.	161			
6.				
7.				

CERTIFICATION OF ANNUAL SWPPP EVALUATION

Is this facility is in compliance with the SWPPP and the VPDES permit VA0002071.
Plan Certification Requirement: I have reviewed and approve the revisions that resulted from this
annual Comprehensive Site Compliance Evaluation.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Authorized Signatory

Signature:	Date:
Printed Name:	
Title:	

STORM WATER POLLUTION PREVENTION PLAN ANNUAL SITE COMPLIANCE EVALUATION

LOCATION: Possum Point Power Station

DATE OF ANNUAL EVALUATION: August 3, 2011 & September 14, 2011 EVALUATION METHOD: Comprehensive SWPPP Checklist

EVALUATION METHOD: Comprehensive SWPPP Checklis EVALUATION TEAM; Jeffrey Marcell & Rick Woolard

SCOPE OF SITE COMPLIANCE EVALUATION:

SUMMARY OF EVALUTION	YES or NO
Answer the following questions with YES or NO	
Inspection Made of Each Material Exposed to Storm Water?	Yes
Inspection Made of Each Activity / Unloading Area Exposed to Storm Water?	Yes
Inspection Made for Contaminants on the Ground?	Yes
Inspection Made for Leaks from Equipment or Containers?	Yes
Inspection Made for Vehicle Tracking Impacts?	Yes
Inspection Made for Materials Blowing from Areas?	Yes
Inspection Made of Pollutants in Drainage Ways?	Yes
Inspection Made of Monitoring and Inspection Records?	Yes
BMPs Identified in the SWPPP Were Checked to See if Used?	Yes
Were the Locations of Outfalls Inspected?	Yes
Site Map(s) Reviewed?	Yes

COMPLIANCE EVALUATION SUMMARY REPORT:

EVALUATION OF OUTFALLS:	TOTALS
Storm Water Outfalls:	15
Process/Allowable Non-Storm Water Outfalls:	6
Compliance Action Item Summary:	YES or NO
Any evidence of Leaks or Spills that may have reached offsite Surface Water?	No
Any evidence of exposure sources contacting Storm Water?	No
Is Written SWPPP Binder Updates Needed?	Yes
Does the Site Map(s) require revisions?	Yes
Are Additional BMPs needed or requiring maintenance?	Yes
Incidents of Non-Compliance of Permit Discharge Limits?	No
Were any issues of Non-compliance found?	No
Was any incidents noted that require Notification?	No

SWPPP TEXT OBSERVATIONS - Possum Point Power Station SWPPP

Corresponding SWPPP Section	REQUIRED SWPPP CONTENTS:	Revision Required (Yes or No)
Page xi	Management Approval Certification	Yes
Section 1.0	Description of Station & its activities	No
Section 2.1	Pollution Prevention Team	Yes
Section 2.1	Spill Response Procedures	Yes
Sections 3.1 & 3.2	Outfall Descriptions	No
Section 3.2	Non-Storm Water Evaluation Certification	No
Section 3.2	Allowable Discharge Descriptions	Yes
Sections 3.3, 3.4 & 3.5	Monitoring and/or Inspections descriptions	No
Sections 4.0	List of Exposed Materials and/or Activities	Yes
Sections 4.2 & 5.0	List of Structural BMPs	Yes
Section 4.4	Construction, Sediment, or Erosion Control discussion	No
Section 5.2.1	Storm Water Training and Schedules	No
Section 6.0	Non-Structural BMPs - Good Housekeeping:	
Section 6.1	Dust Control Equipment Areas	No
Section 6.2	Delivery Vehicle	No
Section 6.3	Fuel Oil Unloading Areas	No
Section 6.4	Chemical Unloading Areas	No
Section 6.5	Miscellaneous Loading / Unloading	No
Sections 6.6 & 6.7	Small and Large Storage Tank Areas	No
Section 6.8	Spill Reduction Measures	No
Section 6.9	Oil Filled Electrical Equipment Areas, e.g., Transformers	No
Section 6.10	Residue Hauling Vehicles	No
Section 6.11	Ash Handling Areas & Hauling Vehicles	No
Section 6.12	Areas Adjacent to Ponds/Basins/Impoundments	No
Section 6.13	Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse	No
Section 6.14	Maintenance Activities	No
Section 6.15	Material Storage Areas	No
Section 7.0	SWPPP Documentation:	A SUBMICE VICE
Section 7.1	Reportable Spills	Yes
Section 7.2 & 7.3	Inspections and Monitoring Documentation Locations	Yes
Section 7.4	Annual Evaluation Documentation	Yes
	SWPPP Map Elements – Summary:	
	Updated Outfall Locations & Numbers	
Appendices A, B & C	Topographical Location & Surface Water Body Names	No
Appendices A, B & C	Drainage Direction by Site Area	No
Appendices A, B & C	Activity Locations Exposed to Storm Water	Yes
Appendices A, B & C	Equipment Locations Exposed to Storm Water	No
Appendices A, B & C	Materials Potentially Exposed to Storm Water	Yes
Appendices A, B & C	Spill or Leak Areas - Past or Potential	1 62

SITE OBSERVATIONS – Possum Point Power Station Site Visit (Records, Site Conditions, Structural / Non-Structural BMPs)

NOTE: List any test methods used in evaluating Nonstorm Water Discharges and the results.

Dry weather evaluation was unable to be preformed on August 3, 2011 due to recent precipitation.

On September 14, 2011 a dry weather evaluation was preformed and a copy of the report is provided in Appendix H of the SWPPP.

SUMMARY DISCHARGE MONITORING DATA:

Visually Monitoring Reports: The past twelve month's of visual monitoring reports were made available. The following summarizes the results:

Outfall S61 – No consistent issues to note.

Outfall S5 – The color of the water is consistently reported as various shades of tan.

Outfall S42 – Solids are consistently observed. Drainage area was evaluated during the site evaluations, no specific contributors were identified, however it should be noted that most of the drainage area is impervious.

Note, the visual monitoring forms should be signed by only VPDES authorized individuals who have been identified in writing to DEQ.

Inspections Records: Past twelve month's inspection records were made available, no consistent issues to note.

Other Observations: NA

SWPPP ACTION ITEMS - Possum Point Power Station

	Action Item	Responsible Person	Completion Deadline	Actual Date Completed
1.	Revise the Appendix B & C drawings.	Rick Woolard	Within 14 days of the Signature below	
2.	The SWPPP text revisions were completed during the annual comprehensive SWPPP evaluation. The signature statement below requires the SWPPP revisions to be reviewed prior to signing the below certification statement	Jeff Marcell	Before Signing below signature	
3.	WILL TO THE RESERVE OF THE PARTY OF THE PART			100
4.	The state of the s			
5,	* * * * * * * * * * * * * * * * * * * *		1177173 33300H 1033-113	
6.				
7.	recommendation of the second s			

CERTIFICATION OF ANNUAL SWPPP EVALUATION

-		
Yes	Is this facility is in compliance with the SWPPP and the VPDES	
1	IS INIS facility is in compliance with the SWPPP and the VPDES r	nermit V & 0002071:
	and the tribute with the bit in the tribute to	20111111 Y /A 000207 III

Plan Certification Requirement: I have reviewed and approve the revisions that resulted from this annual Comprehensive Site Compliance Evaluation.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Authorized Signator	y
Signature:	Sty & Mance Date: 11/19/11
Printed Name:	SERMEN & MARION
Title:	ENVIRONMENTAL SUPERNESOR

Appendix E

SWPPP Inspection Report Forms (SWPPP Permit Reference #12)

SPCC Monthly Oil Inspection Form (Page 1 of 7)

acc	check each item for each tank or area if septable; if unacceptable mark space with and explain in comments section at bottom	5-HO- (Soi 21 milli	uth)	5-HO- (No		00-FO (#2 OII 1,015,0	South)	00-FO (#2 Oil 2 mille	North)	Gen Die	ackup sel Tank gal.
	of form. Date and sign form.										
1	Tank Shell & Roof- Check for:					ř					
a	Drip marks										
b	Discoloration of tanks or flaking										
C	Localized corrosion										
d	Puddles containing oil										
e	Corrosion										
f	Structural Damage										
a	Hairline Cracks						*1				
h	Localized Dead Vegetation										
ï	Vegetation obstructing inspection										
j	Oil at Release Prevention Barrier (RPB) or in leak detection system									N	/A
2	Foundation/Supports-Check for:								2007.000		
a	Cracking or deterioration of support / ringwall									N	/A
b	Discoloration or corrosion			-		1.000				- "-	
C	Puddles containing oil						-				
_	Settlement										
d	Gaps between tank and foundation /	_								-	
e	support										
f	Damage caused by vegetation roots										
g	Vegetation obstructing inspection										
3	Piping			,,		y					
а	Droplets of oil										
b	Discoloration										
С	Corrosion				V-1004						
d	Pipes bowing between supports										
е	Evidence of seepage from valve stems,										
	flanges, seals										
f	Localized dead vegetation near piping										
4	Secondary Containment - Dike or				77	1000	= -				
_	Berm										
а	Standing water (does area need to be					T***			274-3M	i' -	
ч	drained to maintain capacity?)	1				,				N	/A
	If yes, indicate the date the valve is	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
	opened and the date the valve is closed:	Opened	Closed	Opened	Ciosed	Opened	Closed	Opened	Ciosed	Орепви	Closed
	opened and the date the valve is closed:									N/A	N/A
b	Status of dike drain valve and valve lock						-				/A
	(where appropriate)										
С	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping,	×									
-	etc.) Debris outside containment area					1.					
d				-		-					1A
e	Erosion of dike Status of pipes, inlets, drainage beneath	75(07)						- 102		N	/A
	tanks, etc.										
g	Vegetation obstructing inspection				-0.						
	Secondary Containment-Other		20 - 2	gr - 13							
	Cracks									(** <u> </u>	
b	Discoloration										
С	Standing water or oil				-						
d	Corrosion							,			
	Valve conditions						-				

SPCC Monthly Oil Inspection Form (Page 2 of 7)

acci * an	heck each item for each tank or area if eptable; if unacceptable mark space with id explain in comments section at bottom of form. Date and sign form.	Ur Lube O	nit 5 il Room	Un Lube Oi		ปก Lube Oi		First Flo	Orum Oil or Steam Building		ird Lube Room
1	Tank Shell & Roof- Check for:						_				
_	Drip marks										
b	Discoloration of tanks or flaking								MASS .		
C	Localized corrosion										
d	Puddles containing oil										
е	Corrosion										
f	Structural Damage										
q	Hairline Cracks										
h	Localized Dead Vegetation	N,	/A	N/	Ά	N/	Ά	N	/A	N	/A
	Vegetation obstructing inspection	N.	/A	N/	'A	N/	Α	N	/A	N	/A
j	Oil at Release Prevention Barrier (RPB) or in leak detection system		/A	N/		N/			/A	N	/A
	Foundation/Supports-Check for:									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
а	Cracking or deterioration of support / ringwall										-33
	Discoloration or corrosion										
	Puddles containing oil										
	Settlement										
е	Gaps between tank and foundation / support										
	Damage caused by vegetation roots	N.	/A	N/	Ά	N/	Ά	N	/A	N	/A
	Vegetation obstructing inspection		/A	N/	Ά	N/			/A		/A
	Piping										edan.
	Droplets of oil										
	Discoloration					-					
-	Corrosion	2000				12.5				V.	
_	Pipes bowing between supports								- 435	-	
е	Evidence of seepage from valve stems, flanges, seals										
	Localized dead vegetation near piping	N,	/Α	N/	Ά	N/	A	N	/A	N	/A
	Secondary Containment - Dike or										
	Berm Standing water (deep grap and to be			r				T			
	Standing water (does area need to be	N/	'A	N/	Ά	N/	Α	N.	/A	N/A	
	drained to maintain capacity?)	0	Chand	01	011		01 1		In .		In .
	If yes, indicate the date the valve is	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
	opened and the date the valve is closed:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Status of dike drain valve and valve lock (where appropriate)		,, ,				1 4/4 4		1,11/1	14/14	1001
С	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)		ļ								
	Debris outside containment area	_									
	Erosion of dike	N/	Ά	N/	Α	N/	A	N	/A	N	/A
f	Status of pipes, inlets, drainage beneath tanks, etc.			.,,				14.		- N	
	Vegetation obstructing inspection	. N/	Ά	N/	A	N/	A	N.	/A	N	/A
	Secondary Containment-Other				and.						
	Cracks							-			0
-	Discoloration								-		
	Standing water or oil										
	Corrosion		-				200		**		
	Valve conditions										

SPCC Monthly Oil Inspection Form (Page 3 of 7)

acc	Check each item for each tank or area if ceptable; if unacceptable mark space with and explain in comments section at bottom	Turbine	it 3 Lube Oil es.	Uni Turbine Re	Lube Oil	Turbine	it 5 Lube Oil es.	Steam Lube (it 6 Turbine Dil Res.	OII.	ans A&I Res.
	of form. Date and sign form.	3150) gal.	4750	gal.	10,00	0 gal.	4000	gal.	2@	80 gal.
1	Tank Shell & Roof- Check for:			11.							
а	Drip marks										
b	Discoloration of tanks or flaking										
C	Localized corrosion										
d	Puddles containing oil										
e	Corrosion									İ	
f	Structural Damage									1	
q	Hairline Cracks									1	
h	Localized Dead Vegetation	N	/A	N/	Ά	N	/A	N	/A	†	
ï	Vegetation obstructing inspection		/A	N/			/A		/A	 	
j	Oil at Release Prevention Barrier (RPB) or in leak detection system		/A	N/			/A		/A		
2	Foundation/Supports-Check for:										
a	Cracking or deterioration of support /					Ĭ					
b	Discoloration or corrosion							—		1	
	Puddles containing oil									—	
C	Settlement							_		<u> </u>	
d						-					
ę	Gaps between tank and foundation / support										
f	Damage caused by vegetation roots		/A	N/	'A		/A	N.	/A		
g	Vegetation obstructing inspection	N.	/A	N/	'A	N	/A	N	/A		
3	Piping										
а	Droplets of oil										
b	Discoloration										
С	Corrosion										
d	Pipes bowing between supports										
e	Evidence of seepage from valve stems, flanges, seals										
f	Localized dead vegetation near piping										
_	Localized dead vegetation hear piping	N.	/A	N/	Α	N/	'A	N.	/A		
4	Secondary Containment - Dike or										
	Berm										
а	Standing water (does area need to be	N.	/^	N/	'Λ	N/	/A	N	/A	N	/A
	drained to maintain capacity?)	I IN	/A	141	^	170/	^	IN.	/A	I N	/A
	If yes, indicate the date the valve is	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
	opened and the date the valve is closed:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Status of dike drain valve and valve lock (where appropriate)									8:	
С	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)										
d	Debris outside containment area										
е	Erosion of dike	N/	/A	N/	A	N/	Ά	N	/A	. N	/A
	Status of pipes, inlets, drainage beneath tanks, etc.				•		107				
g	Vegetation obstructing inspection	N/	/A	N/	A	N/	Ά	N	/A		
5	Secondary Containment-Other										
а	Cracks	-									
b	Discoloration										
		-									
_	Standing water or oil										
c d	Standing water or oil Corrosion				-						

SPCC Monthly Oil Inspection Form (Page 4 of 7)

		,						_					
	heck each item for each tank or area if	U4 ID Fa	ans A&B	U5 ID	Fans	00-FO	-TK-3)-TK-4	00-FC	D-TK-5		
	eptable; if unacceptable mark space with		Res.	A,B,0		Diesel Fi			ie (3000	1	sene		
* ar	d explain in comments section at bottom		5 gal.	4@87		1000			Diesel	1	gal.		
	of form. Date and sign form.		V gun	160.	34		3	(5000	gal.)		.		
1	Tank Shell & Roof- Check for:												
а	Drip marks												
b	Discoloration of tanks or flaking									1			
C	Localized corrosion												
d	Puddles containing oil												
е	Corrosion												
f	Structural Damage												
a	Hairline Cracks												
	Localized Dead Vegetation												
T	Vegetation obstructing inspection												
广	Oil at Release Prevention Barrier (RPB)												
١, ١	or in leak detection system					N/	Ά	N	/A	N	I/A		
2	Foundation/Supports-Check for:					//							
a	Cracking or deterioration of support /			ſ			THE PARTY			1			
a	ringwall					N/	Α						
ь	Discoloration or corrosion												
C	Puddles containing oil						1701						
d	Settlement												
e	Gaps between tank and foundation /												
"	support					ė							
T	Damage caused by vegetation roots							N	/A	N	I/A		
g	Vegetation obstructing inspection												
3	Piping						URSWOOD.						
а	Droplets of oil							r					
b	Discoloration												
C	Corrosion							****					
_	Pipes bowing between supports				100					_			
	Evidence of seepage from valve stems,												
6	flanges, seals									ł			
F	Localized dead vegetation near piping	- 172							211				
١.	Localized dead vegetation hear piping							N/A		N/A		N	l/A
4	Secondary Containment - Dike or												
1	Berm												
a	Standing water (does area need to be				-1474			ř			W		
"	drained to maintain capacity?)	N.	/A	N/	A	N/	Ά	N.	/A	N	/A		
	If yes, indicate the date the valve is	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed		
_	opened and the date the valve is closed:		-										
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
b	Status of dike drain valve and valve lock			=======================================		N/	Ά	N	/A	N	/A		
_	(where appropriate)		_										
C	Permeability of dike wall & floor (cracks												
	or holes, from rodents, trees, piping,	l		i i		l		l		ł			
	etc.)												
	Debris outside containment area												
	Erosion of dike	N,	/A	N/	Α	N/	Α	-					
f	Status of pipes, inlets, drainage beneath tanks, etc.												
	Vegetation obstructing inspection												
								L					
	Secondary Containment-Other	200				-				1			
	Cracks												
	Discoloration			_									
_	Standing water or oil						_		-11501				
	Corrosion Valve conditions			_							_		
e				1		17		I					

SPCC Monthly Oil Inspection Form (Page 5 of 7)

Oil Retention Pond Inspection

acc	check each item for each tank or area if eptable; if unacceptable mark space with and explain in comments section at bottom of form. Date and sign form.	Oil Retention Pond	-		10:	
	Retention and Drainage Ponds		 	 	Property Company	
а	Erosion					
b	Available capacity					
Ç	Presence of oil					
d	Debris					
е	Stressed vegetation					

Leak Detection

Leak Detection	Sat	Unsat	Comments
False start drain tank Unit 6 A			
False start drain tank Unit 6 B			
Oily Water Separator			

SPCC Montly Oil Inspection (Page 6 of 7) Misc. Areas

Area	Status (OK: Y/N)	Comments
5-HO-TK-1A		
Piping		
5-HO-TK-1B		
Piping		
00-FO-TK-1		
Piping	<u>*</u>	
00-FO-TK-2		14
Piping		
00 FO TK 2		
00-FO-TK-3 Piping		İ
i iping	_	
Dike Penetrations:	700	,
1@HO Tanks		
3@FO Tanks		-
Oil Docks / Piping	100	
Pa.		
Trash Dumpsters & Metals		
Dumpster		
Sand & Gravel Stock Piles		
U5 A&B Cooling Towers		
Warehouse Oil Storage Area		
Ligit 4 Lload Oil Area		
Unit 1 Used Oil Area		
Unit 5 Used Oil Area		
44 EK Voud	-	
115Kv Yard	5	
		

SPCC Montly Oil Inspection (Page 7 of 7) Misc. Areas Cont'd

Area	Status (OK: Y/N)	Comments
Unit 3 Basement		
(Misc. Equipment)		
Unit 4 Basement	31130 41 41 41 41	
(Misc. Equipment)		
Unit 5 Basement	-	
(Misc. Equipment)	*	•
Unit 6 HRSG Boiler Feed		
Pumps .		
Unit 6 Steam Turbine Hydraulic		1,1,1,1,1
Oil Reservoir		
Unit 6 A/B Lube Oil Accesory	5.50	1
Modules		
Mobil Oil Carts (5 Total)		
Includes U6 Portable Trailer		
U5 Transfer Pump House	200-1894	
Coal Conveyor Areas (2)		3
Oil Retention Pond		
\(\frac{1}{2}\)		

			
Date:	<u>.</u>	Signature:	
General Comments:			

Possum Point Power Station Storm Water Quarterly Visual Examination Report Monitoring Year_____ Outfall # _S5 (VA)____

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March	April - June	July - September	October - December
	Manifester Desired	April – ourie	odly - deptember	
	Monitoring Period	Monitoring Period	Monitoring Period	Monitoring Period
Date/Time				
Rainfall in Inches				19-10-
Number of hours or days from previous 0,1° event rhich caused a discharge.				
Examiner(s)				
Nature of Discharge				
Visuel Quality of Discharge				
Color				
Odor				
Clarity				
Floating Solids				12-
Settled Solids		-10		
Suspended Solids		4		
Foam				
Oil Sheen				
Any other obvious indicators of contamination				
robable source(s) of any observed storm water contamination				
Certification Signature Read Statement Below			· · · · · · · · · · · · · · · · · · ·	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Comments:						

Possum Point Power Station Storm Water Quarterly Visual Examination Report Monitoring Year_____ Outfall # S42 (MD)

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March Monitoring Period	April – June Monitoring Period	July – September Monitoring Period	October – December Monitoring Period
Date/Time				
Rainfall in Inches				- STATE -
Number of hours or days from previous 0,1° event which caused a discharge.				
Examiner(s)		73.		
Nature of Discharge				
/isual Quality of Discharge	-7			
Color				
Odor				
Clarity				
Floating Solids				
Settled Solids				
Suspended Solids				
Foam	894			
Oil Sheen				
Any other abvious ndicators of contamination				
Probable source(s) of any observed starm water contamination				
Certification Signature Read Statement Below				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Saced on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

2-01-01

Possum Point Power Station Storm Water Quarterly Visual Examination Report Monitoring Year_____ Outfall # _S61 (VA)___

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March Monitoring Period	April – June Monitoring Period	July – September Monitoring Period	October – December Monitoring Period
Date/Time				
Rainfall in Inches				
Number of hours or days from previous 0.1" event which caused a discharge.				
Examiner(s)				
Nature of Discharge				
Visual Quality of Discharge		***		
Color				
Odor				
Ctarity				
Floating Solids				
Settled Solids				
Suspended Solids				
Foam				
Oil Sheen				
Any other obvious adicators of contamination			E	
observed storm water contamination				
Certification Signature Read Statement Below				

t certify under penalty of taw that this document and all attachments were prepared under my direction or expension in accordance with a system designed to assume that qualified personnel property gather and evaluate the information submitted. Eased on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Comments:		- India		
			***	-2-2002

Appendix F Cooling Tower Mist Study

D	0.
RLOMUA	Root, Inc.

HOUSTON, TEXAS

((143))	CR-0105	
NY .	P.O. No. 35-1181-210	re

Pos	VIRGINIA ELECTRIC AND F Sum PEGOT US CONTINE TOWE		K 19	P.O. 35-11		210	92
(Cooling Tower Accessories		DAYE	PAGE	1	OF	· 6 /
ŀ	Manufacturer	The Marley C	Company	*1*1			
1	Type/Model	Cross Flow/6	616-4-11 c1	ass 600)	117	
ľ	Number Cooling Towersq	2	<u> </u>		75	120	
ľ	Number Cells Per Tower	11				N/	14 020
1	lag :	M-529 A&B				*	
1	Performance Data	•					
	Water to Air Ratio Fill Height, Ft. Total Wetted Surf, 22 Cells,	41.02 .005 90 29.92 0 to 10 10,000 95,683 101.4 101.4	0xcF1 = (, o ** = w AN IN 116/06 - SRA	EN THE CO	(WE)	* 7	6.5gpm
- 5	a	12					

(A) 7-1-75

-21-

6-2-1A

COOLING TOWER SPECIFICATIONS AND **EQUIPMENT DATA SHEET**

IF ANY DIFFICULTIES OR PROBLEMS OCCUR, CALL: PSYCHROMETRIC SYSTEMS, INC.

1-303-215-1100

REDUM KENT UL COOIZIG TOWER

TOWER MODEL NUMBER CFF-484838-10B-33 **CUSTOMER NAME** GE INTERNATIONAL CONTRACT NUMBER 70100818 PSYCHROMETRIC SYSTEMS JOB NUMBER 01-116 LOCATION POSSUM POINT, VA COMPLETION DATE 3/11/01

PERFORMANCE DATA

* WATER CIRCULATION, US GPM 189463 INLET WATER CIRCULATION TEMPERATURE (°F) 103.56 **OUTLET WATER TEMPERATURE (°F)** 88.98 DESIGN WET BULB TEMPERATURE (°F) 75.96 ELEVATION (FT) 67 FT

TOWER DESIGN DATA

TYPE BACK TO BACK COUNTERFLOW NUMBER OF CELLS 10 CELL SIZE (FT x FT) 48 X 48 OVERALL LENGTH/WIDTH (FT x FT) 240 X 96 BASIN CURB TO DISTRIBUTION CENTER LINE (FT) 26'-11" DISTRIBUTION TYPE LOW PRESSURE DOWN SPRAY # DRIFT'LOSS (% CIRCULATION) 0.005% DRIFT ELIMINATOR TYPE BRENTWOOD CDX-150 FILL TYPE **BRENTWOOD VF19/**

BRENTWOOD 1900BR ACCESS TO TOP OF TOWER 1 FRP STAIR & 1 FRP LADDER FAN DECK LIVE LOAD (PSF) 60 SNOW LOAD (PSF) 30 DESIGN WIND VELOCITY (MPH) 80

MATERIALS STRUCTURE **BOLTING HARDWARE** NAILING HARDWARE BASE ANCHORS JOINT CONNECTORS GEAR SUPPORT MEMBERS

FIBERGLASS 316 LSS (0.0005) × (18963) *9.47 316 LSS 316 SS 316 SS HDG

Page 1-2

= WHON THE COULTENT TOWAR IS IN SERVICE AND HE UNE IS OFFINING



DRIFT ELIMINATOR PRODUCT SUMMARY

Possum losar U6 Coolag Tower

Product	Туре	Standard Gauges Con/Wave	Gauges Factor' @.075 lb/ft'		Drift Rate ³			
	1.5277	(Nom. mils)	10 70 70	(ft)		(in. wg.)		(% w.f.)
CDX-080	Cellular	10/15	1.22	4	0.024	0.037	0.049	0.001
188		15/15	1.36	4	W	H	10	D.
		10/25	1.47	6	И			н
		10/35	2.56	8		41	-	"
CDX-150	Cellular	15/15	1.00	4	0.021	0.032	0.044	0.002
		15/25	1.19	6	T T	n	307	11
		15/35	1.81	8	•	н	Ħ	şi
DE-080	Blade	25	1.00	6	0.015	0.021	0.028	0.002
DE-097	Blade	25	1.14	6	0.035	0.052	0.071	0.004
DE-120	Blade	25	0.71	6	0.017	0.024	0.033	0.005

^{*}Based on 5/1/95 price list with CDX-150 15/15 price factor of 1.00

10/19/06 - JAM



²Max, span for a two point, simply supported arrangement at a maximum sir temperature of 115°F

³Based on the CTH/BIK test method. These limits are guidelines only. Please contact Brentwood for project specific values.

Appendix G

Construction Sediment and Erosion Control

Appendix H

Storm Water Discharge Certification

Possum Point Power Station Non-Storm Water Discharge Evaluation

Outfall ID	Method	Observation	
Outfall S107	Dry Weather Evaluation	Wet and flowing - Historical investigation deemed to be groundwater.	
Outfall S95	Dry Weather Evaluation	Wet but no flow.	
Outfall S94	Dry Weather Evaluation	Dry and no flow	
Outfall S86	Dry Weather Evaluation	Dry and no flow	
Outfall S5	Dry Weather Evaluation	Dry and no flow	
Outfall S37	Dry Weather Evaluation	Dry and no flow	
Outfall S31	Dry Weather Evaluation	Dry and no flow	
Outfalf S36	Dry Weather Evaluation	Wet bu no flow	
Outfall S42	Dry Weather Evaluation	Wet and flowing - Historical investigation deemed to be groundwater.	
Outfall S49	Dry Weather Evaluation	Dry and no flow	
Outfall \$77	Dry Weather Evaluation	Dry and no flow	
Outfall S78	Dry Weather Evaluation	Dry and no flow	
Outfall S79	Dry Weather Evaluation	Dry and no flow	
Outfall S80	Dry Weather Evaluation	Dry and no flow	

Inspectors: Jeff Marcell & Rick Woolard

Date: September 14, 2011

that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signatory

Date

Appendix I Spill History

Possum Point Reportable Spill History

Date	Description and Corrective Action
01/31/2003	Unit 5A Gas Recirc Fan 30 gallons of lube oil to ground, contained and cleaned.
07/17/2003	Old discharge pipe for Outfall 004 ruptured, simultaneous discharge of pond from old and existing locations, plugged next day.
09/24/2003	Old #4 sump discharge pipe, previously plugged, broke because of Hurricane Isabel, release of #4 sump, plugged same day.
10/29/2004	Lost control of Front-end loader at Boat Ramp, submerged engine in Potomac River, release sheen, contained and cleaned.
03/02/2005	Unit 6 Neutralization Pit overflow to storm drain leading to Potomac River.
07/05/2005	Old Combustion Turbine fuel oil supply line rupture on #1 and #2 units; release of 200 gallons between ground and Pond "E" and cleaned, cleaned ground area surrounding each CT.
09/26/2005	Unit 6 Cooling Tower pH excursion for Outfall 202 which discharges into Outfall 001/002.
04/13/2006	Unit 6 Service Water chlorine overfeed, discharge of chlorine above permit limit for Outfall 004.
07/03/2007	Unit 6B Inlet Guide Vane to Combustion Turbine pressurized oil leak to ground, release of 600 gallons to ground, contained and cleaned.
11/12/2008	#6 Oil leak from Units 1&2 return line on Pipe Bench. Line repaired and vacuumed; ~200 gallons to ground.
06/25/2008	#5 Oil Water discharge to weir, Outfalls 001 & 004; Flood Admin area; Line was repaired.
11/10/2009	Detergent/water discharged to Outfall S36; Portable wash station & Port-a-John were re-located.
07/26/2010	Process water overflow form Unit 6 Neutralization Pit to Outfall S42; equipment repaired.
	01/31/2003 07/17/2003 09/24/2003 10/29/2004 03/02/2005 07/05/2005 04/13/2006 07/03/2007 11/12/2008 06/25/2008 11/10/2009

Note: The locations of the spills are posted on the Appendix C "SWPPP Drawing" with the Red #s that correspond with the #s posted in the above Map Key column.

Appendix J POTW Authorization Email

H.L. Mooney Wastewater Treatment Plant. Our primary discharge is sanitary wastewater with incidental laboratory discharge. We have approximately 100 employees, not all 100 are on site at one time. Our industrial discharge is covered by a Virginia Department of Environmental Quality Individual Discharge Permit. The laboratory discharge is infrequent and is the result of chemical analyses for boiler/steam quality and water permit compliance.

As discussed the two qualifications which require a specific permit from PWCSA are as follows:

1) Discharge of sanitary wastewater equal to or greater than 25,000 gallons per day

and/or

2) Discharge of industrial/chemical waste in quantities that will impact the H.L. Mooney treatment system.

It is our understanding that Possum Point does not qualify in either of the two conditions, therefore no permit is required.

Please respond back to close the loop in our documentation.

Thanks for you time:

Jeff Marcell Sr. Environmental Compliance Coordinator Dominion-Possum Point Power Station 703-441-3813 (phone) 8-795-3813 (tie) 703-441-3897 (fax)

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Laboratory Data Sheets For Intake Water Samples

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 11/01/2011

Page 1 of 6

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803 Description :INTAKE

Sample Date: 09/14/2011 Unit: 0

Note: < value = N.D. at value (MDL)

Parameter		Result		Test Code	Analyst	Date Analyzed	Time Analyzed
Ammonia as N, PPM Boron as B, PPM COD, PPM Fluoride as F, PPM		0.05	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805
Boron as B, PPM		0.02	SM18TH 4500-B B		DONNA13	09/27/2011	1330
COD, PPM		8.68	HACH 8000	COD	DONNA13	09/19/2011	1205
Fluoride as F, PPM		0.104	EPA 300	FIC	DAWNE01	10/06/2011	2137
NO3+NO2, PPM		0.74	EPA 353.2	NO3NO2	DONNA13	09/22/2011	1028
Oil and Grease, PPM	*()	< 5.00	EPA 1664A	O&G	TANYA19	09/27/2011	930
Phenol, PPM		0.01	EPA 1664A EPA 420.1	PHENOL	TANYA19	09/23/2011	1253
Sulfate as SO4, PPM		20.78	EPA 300	SO4IC	DAWNE01	10/06/2011	2137
TK Nitrogen as N, PPM		< 0.30	EPA 351.2		DONNA13	09/27/2011	1040
TOC, PPM		6.9	SM18TH 5310B	TOC	DONNA13	09/19/2011	1057
TSS, PPM		23.0	SM18TH 2540D	TSS	TANYA19	09/20/2011	1430
Total Phos. as P, PPM		0.09	SM18TH 4500-P	TP	TANYA19	09/27/2011	1330
Aluminum as Al, PPM		0.61	SM18TH 3111D	AL	DAWNE01	10/28/2011	1402
Antimony as Sb, ppb		< 1.	SM18TH 3113B	SBPPB	STEVE72	10/10/2011	1048
Arsenic as As, ppb		< 3.	SM18TH 3113B	ASPPB	STEVE72	09/21/2011	1738
Barium as Ba, ppb	Ya	36.	SM18TH 3113B	BAPPB	STEVE72	10/11/2011	833
Fluoride as F, PPM NO3+NO2, PPM Oil and Grease, PPM Phenol, PPM Sulfate as SO4, PPM TK Nitrogen as N, PPM TOC, PPM TSS, PPM Total Phos. as P, PPM Aluminum as Al, PPM Antimony as Sb, ppb Arsenic as As, ppb Barium as Ba, ppb Beryllium as Be, ppb Cadmium as Cd, ppb Chromium as Cr, ppb Cobalt as Co, ppb Copper as Cu, ppb Iron as Fe, PPM Lead as Pb, ppb Magnesium as Mg, PPM		< 0.2	SM18TH 3113B	BEPPB	STEVE72	10/10/2011	2152
Cadmium as Cd, ppb		< 0.3	SM18TH 3113B	CDPPB	STEVE72	10/10/2011	1601
Chromium as Cr, ppb		< 1.	SM18TH 3113B	CRPPB	STEVE72	10/11/2011	1334
Cobalt as Co, ppb		< 0.6	SM18TH 3113B	COPPB	STEVE72	10/10/2011	1855
Copper as Cu, ppb		3.	SM18TH 3113B	CUPPB	STEVE72	10/10/2011	1829
Iron as Fe, PPM		1.37	SM18TH 3111B	FE	DAWNE01	10/27/2011	1344
Lead as Pb, ppb		< 1.	SM18TH 3113B	PBPPB	STEVE72	10/10/2011	1431
Magnesium as Mg, PPM		5.72	SM1,8TH 3111B	MG	DAWNE01	10/28/2011	1238
Manganese as Mn, PPM	. Š	0.63	SM18TH 3111B	MN	DAWNE01	10/27/2011	1616
Mercury as Hg, ppb		< 0.2	SM18TH 3112B	HGPPB	STEVE72	09/21/2011	848
Molybdenum as Mo,ppb		< 1.	SM18TH 3113B	MOPPB	STEVE72	10/06/2011	1222
Nickel as Ni, ppb	¥/	< 5.	SM18TH 3113B	NIPPB	STEVE72	10/10/2011	1951
Selenium as Se, ppb		< 3.	SM18TH 3113B	SEPPB	STEVE72	09/21/2011	1413
Silver as Ag, ppb		< 0.1	SM18TH 3113B	AGPPB	STEVE72	09/22/2011	841
Thallium as Tl, ppb		0.4	EPA 279.2	TLPPB	STEVE72	10/10/2011	1546
Tin as Sn, ppb		< 5.	SM18TH 3113B	SNPPB	STEVE72	10/06/2011	1002
Titanium as Ti, ppb		< 2.	EPA 283.2	TIPPB	STEVE72	10/11/2011	833
Lead as Pb, ppb Magnesium as Mg, PPM Manganese as Mn, PPM Mercury as Hg, ppb Molybdenum as Mo,ppb Nickel as Ni, ppb Selenium as Se, ppb Silver as Ag, ppb Thallium as Tl, ppb Tin as Sn, ppb Titanium as Ti, ppb Zinc as Zn, PPM Methyl Chloride, ppb Methyl Bromide, ppb Vinyl Chloride, ppb		0.023	SM18TH 3111B	ZN	DAWNE01	10/27/2011	1440
Methyl Chloride, ppb		< 1.10	EPA 624	VOA624	CHAR130	09/20/2011	1236
Methyl Bromide, ppb		< 1.40	EPA 624	VQA624	CHAR130	09/20/2011	1236
Vinyi Chloride, ppb		< 1.80	EPA 624	VOA624	CHAR130	09/20/2011	1236

DOMINION LABORATORY SERVICES REPORT PRODUCED ON 11/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT Submitter: GLENN BISHOP

System Laboratory Number: 392803 Sample Date: 09/14/2011

Description : INTAKE Unit: 0

Note: < value = N.D. at value (MDL)

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Chloroethane, ppb	< 1.10		VOA624	CHAR130	09/20/2011	1236
Methylene Chloride, ppb			VOA624	CHAR130	09/20/2011	1236
Acrolein, ppb	< 10.00		VOA624	CHAR130	09/20/2011	1236
Acrylonitrile, ppb	< 1.50		VOA624	CHAR130	09/20/2011	1236
Trichlorofluoromethane, ppb	< 2.30		VOA624	CHAR130	09/20/2011	1236
1,1-Dichloroethylene, ppb	< 2.80		VOA624	CHAR130	09/20/2011	1236
1,1-Dichloroethane, ppb	< 4.70		VOA624	CHAR130	09/20/2011	1236
1,2-Trans-Dichloroethylene, ppb	< 1.60		VOA624	CHAR130	09/20/2011	1236
Chloroform, ppb	< 1.60		VOA624	CHAR130	09/20/2011	1236
1,2-Dichloroethane, ppb	< 2.80		VOA624	CHAR130	09/20/2011	1236
1,1,1-Trichloroethane, ppb	< 3.80		VOA624	CHAR130	09/20/2011	1236
Carbon Tetrachloride, ppb	< 2.80		VQA624	CHAR130	09/20/2011	1236
Dichlorobromomethane, ppb	< 2.20		VOA624	CHAR130	09/20/2011	1236
1,2-Dichloropropane, ppb	< 6.00		VOA624	CHAR130	09/20/2011	1236
Cis-1 3-Dichloropropylene, ppb	< 5.00		VOA624	CHAR130	09/20/2011	1236
Trans-1 3-Dichloropropylene, ppb			VOA624	CHAR130	09/20/2011	1236
Trichloroethylene, ppb	< 1.90		VOA624	CHAR130	09/20/2011	1236
Chlorodibromomethane, ppb	< 3.10		VOA624	CHAR130	09/20/2011	1236
Benzene, ppb	< 4.40		VOA624	CHAR130	09/20/2011	1236
1,1,2-Trichloroethane, ppb	< 5.00		VOA624	CHAR130	09/20/2011	1236
2-Chloroethylvinyl Ether, ppb	< 1.20		VOA624	CHAR130	09/20/2011	1236
Bromoform, ppb	< 4.70		VOA624	CHAR130	09/20/2011	1236
1,1,2,2-Tetrachloroethane, ppb	< 6.90		VOA624	CHAR130	09/20/2011	1236
Tetrachloroethylene, ppb	< 4.10		VOA624	CHAR130	09/20/2011	1236
Toluene, ppb	< 6.00		VOA624	CHAR130	09/20/2011	1236
Chlorobenzene, ppb	< 6.00		VOA624	CHAR130	09/20/2011	1236
Ethylbenzene, ppb	< 7.20		VOA624	CHAR130	09/20/2011	1236
1,3 Dichlorobenzene, ppb	< 500		VOA624	CHAR130	09/20/2011	1236
1,4 Dichlorobenzene, ppb	< 5.00		VOA624	CHAR130	09/20/2011	1236
1,2 Dichlorobenzene, ppb	< 5.00		VOA624	CHAR130	09/20/2011	1236
Dis. Tl, pph	0.2	EPA 279.2	TLDISPPB	STEVE72	10/10/2011	1546
Dis. Ti, ppb	< 2.	EPA 283.2	TIDISPPB	STEVE72	10/11/2011	833
Dis. Sn, ppb	< 5.	SM18TH 3113B	SNDISPPB	STEVE72	10/06/2011	1002
Dis. Se, ppb	< 3.	SM18TH 3113B	SEDISPPB	STEVE72	09/21/2011	1413
Dis. Sb, ppb	< 1.	SM18TH 3113B	SBDISPPB	STEVE72	10/10/2011	1048
Dis. Pb, ppb Dis. Ni, ppb	< 1.	SM18TH 3113B	PBDISPPB	STEVE72	10/10/2011	1431
DIS. NI, PPD	< 5.	SM18TH 3113B	NIDISPPB	STEVE72	10/10/2011	1951

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803 Description :INTAKE

Sample Date: 09/14/2011

Unit: 0

Note: < value = N.D. at value (MDL)

Parameter	-	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Dis. Mo, ppb Dis. Hg, ppb	<	1	SM18TH 3113B	MODISPPB	STEVE72	10/06/2011	1222
Dis. Hg, ppb	<	0.2	SM18TH 3112B	HGDISPPB	STEVE72	09/21/2011	848
Dis. Cu, ppb		2.	SM18TH 3113B	CUDISPPB	STEVE72	10/10/2011	1829
Dis. Cr, ppb	<	1 2 0	SM18TH 3113B	CRDISPPB	STEVE72	10/11/2011	1334
Dis. Co, ppb	<	0.6	SM18TH 3113B	CODISPPB	STEVE72	10/10/2011	1855
Dis. Cd, ppb	<	0.3	SM18TH 3113B	CDDISPPB	STEVE72		
Dis. Be, ppb	<	0.2	SM18TH 3113B	BEDISPPB	STEVE72	10/10/2011	1601
Dis. Ba, ppb		36	SM18TH 3113B	BADISPPB	STEVE72	10/10/2011	2152
Dis. As, ppb	<	3	SM18TH 3113B	ASDISPPB		10/11/2011	833
Dis. Ag, ppb	~	0.1	SM18TH 3113B	AGDISPPB	STEVE72	09/21/2011	1738
Dis. Zn. PPM	-	0.010	SM18TH 3111B		STEVE72	09/22/2011	841
Dis. Mn. PPM	_	0.010	SM18TH 3111B	ZNDIS	DAWNE01	10/27/2011	1440
Dis. Mg. PPM		5 27	SM18TH 3111B	MNDIS	DAWNE01	10/27/2011	1616
Dis. Fe. PPM		7.27	SMIGHT SILLB	MGDIS	DAWNE01	10/28/2011	1238
Dis. Al. PPM	_	1.37	SM18TH 3111B	FEDIS	DAWNE01	10/27/2011	1344
T-Hard, as CaCO3 PPM	_	75 24	SM18TH 3111D	ALDIS	DAWNE01	10/28/2011	1402
Chloride as Cl DDM		10.29	SM18TH 2340C	HARD	TANYA19	09/30/2011	1030
Nitrate ac N DDM		20.54	EPA 300	CLIC	DAWNE01	10/06/2011	2137
Table Solide DDM		0.81	EPA 353.2	NO3	DONNA13	09/15/2011	1343
Cyanide as CN DDM	_	1/3.0	SM18TH 2540C		TANYA19	09/20/2011	1430
Hydrogen Culfide Dow	<	0.010	SM 4500CN E	CN	HERBE31	09/16/2011	
1 2 Diphonalhadranian	<	0.05	EPA 376.1	HYDSULF	HERBE31	10/05/2011	
1,2 Diphenyinydrazine, ppb	<	0.1	EPA 625	625DPH	HERBE31	10/10/2011	
Chrom +6 ac Cmc DDM	<	3.00	SM 5210 B		HERBE31	09/16/2011	1300
Promide as Dry Dry	<	0.005	SM 3500-CR D		HERBE31	09/15/2011	930
Color DCH		5.90	EPA 320.1	BR	HERBE31	09/28/2011	
MANG TO TAG DAY		35.0	SM18TH 2120B		HERBE31	09/15/2011	1600
MBAS as LAS, PPM	<	0.010	SM 5540C	SURF	HERBE31	09/16/2011	
Chromium as Cr, PPM	<	0.02	SM18TH 3120B	CR-ICP	HERBE31	09/26/2011	
Aldrin, ppo	<	0.050	EPA 608	608GC	HERBE31	10/05/2011	
Chiordane, ppb	<	0.200	EPA 608	608GC	HERBE31	10/05/2011	
Dieldrin, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDT, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDE, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDD, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endosulfan Sulfate, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endosultan I, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	
Dis. Mo, ppb Dis. Hg, ppb Dis. Cu, ppb Dis. Cu, ppb Dis. Co, ppb Dis. Co, ppb Dis. Cd, ppb Dis. Cd, ppb Dis. Ba, ppb Dis. Ba, ppb Dis. As, ppb Dis. As, ppb Dis. Mn, PPM Dis. Mn, PPM Dis. Mg, PPM Dis. Al, PPM T-Hard. as CaCO3, PPM Chloride as Cl, PPM Nitrate as N, PPM T-Dis. Solids, PPM Cyanide as CN, PPM Hydrogen Sulfide, PPM 1, 2 Diphenylhydrazine, ppb BOD, PPM Chrom. +6 as Cr6, PPM Bromide as Br, PPM Color, PCU MBAS as LAS, PPM Chromium as Cr, PPM Aldrin, ppb Chlordane, ppb Dieldrin, ppb 4,4-DDT, ppb 4,4-DDT, ppb 4,4-DDD, ppb Endosulfan Sulfate, ppb Endosulfan I, ppb Endosulfan II, ppb	<	0.100	EPA 608	608GC	HERBE31	10/05/2011	

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REPORT PRODUCED ON 11/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803 Description :INTAKE

Sample Date: 09/14/2011

Unit: 0

Note: < value = N.D. at value (MDL)

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed

Endrin, ppb	< 0.100	EPA 608	60000	********		
Alpha-BHC, ppb	< 0.100		608GC	HERBE31	10/05/2011	-
Beta-BHC, ppb	< 0.050		608GC	HERBE31	10/05/2011	
Delta-BHC, ppb	< 0.050		608GC	HERBE31	10/05/2011	
Gamma-EHC (Lindane), ppb	< 0.050	-	608GC	HERBE31	10/05/2011	
Heptachlor, ppb	< 0.050		608GC	HERBE31	10/05/2011	-
Kepone, ppb			608GC	HERBE31	10/05/2011	
	< 0.100		608GC	HERBE31	10/05/2011	
Methoxychlor, ppb Mirex, ppb	< 0.100		608GC	HERBE31	10/05/2011	
Endrin Aldehyde, ppb	< 0.100		608GC	HERBE31	10/05/2011	
Hontaghlor Provide and	< 0.100		608GC	HERBE31	10/05/2011	
Heptachlor Epoxide, ppb	< 0.100		608GC	HERBE31	10/05/2011	
Toxaphene, ppb	< 5.000		608GC	HERBE31	10/05/2011	
Arochlor 1016, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1221, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1232, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1242, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1248, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1254, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1260, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
2,4-D, ppb	< 10.00	EPA 615	8151GC	HERBE31	10/10/2011	
Silvex, ppb	< 2.00	EPA 615	8151GC	HERBE31	10/10/2011	
Chlorpyrifos, ppb	< 0.2000		ORGPHOS	HERBE31	09/23/2011	
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Diazinon, ppb	< 1.0000		ORGPHOS	HERBE31	09/23/2011	
Guthion, ppb	< 1.0000		ORGPHOS	HERBE31	09/23/2011	
Malathion, ppb	< 1.0000		ORGPHOS	HERBE31	09/23/2011	
Parathion, ppb	< 1.0000		ORGPHOS	HERBE31	09/23/2011	
Phenol, ppb	< 5.00		ACID625	HERBE31	10/10/2011	
2-Chlorophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2-Nitrophenol, ppb	< 5.00		ACID625	HERBE31		
2,4-Dimethylphenol, ppb	< 5.00		ACID625	HERBE31	10/10/2011	
2,4-Dichlorophenol, ppb	< 5.00		ACID625		10/10/2011	
4-Chloro-3-Methylphenol, ppb	< 5.00			HERBE31	10/10/2011	
2,4,6-Trichlorophenol, ppb	< 5.00		ACID625	HERBE31	10/10/2011	
2,4-Dinitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
4-Nitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2-Methyl-4,6-Dinitrophenol, ppb	< 5.00		ACID625	HERBE31	10/10/2011	
a manning and printer objection, bbb	· 5.00	EPA 625	ACID625	HERBE31	10/10/2011	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803 Description :INTAKE

Sample Date: 09/14/2011

Unit: 0

Note: < value = N.D. at value (MDL)

Parameter		esult		hod	Test Code	Analyst	Date Analyzed	Time Analyzed
Pentachlorophenol, ppb	<	5.00	EPA	625	ACID625	HERBE31	10/10/2011	
N-Nitrosodimethylamine, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Bis(-2-Chloroethyl) ether, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Bis(2-Chloroisopropyl) ether, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
N-nitroso-Di-n-propylamine, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Hexachloroethane, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Nitrobenzene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Isophorone, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
Bis(-2-Chloroethoxy) Methane, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
1,2,4-Trichlorobenzene, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
Naphthalene, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
Hexachlorobutadiene, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
Hexachlorocyclopentadiene, ppb	<	5.00	EPA	625	BN625	HERBE31	10/10/2011	
2-Chloronaphthalene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Dimethyl Phthalate, ppb		5.00	EPA	625	BN625	HERBE31	10/10/2011	
Acenaphthylene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
2,6-Dinitrotoluene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Acenaphthene, ppb	<			625	BN625	HERBE31	10/10/2011	×
2,4-Dinitrotoluene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Diethylphthalate, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
Fluorene, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
4-Chlorophenyl-phenylether, ppb	<	5.00		625	BN625	HERBE31	10/10/2011	
N-nitrosodiphenylamine, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
1,2-Diphenylhydrazine, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
4-Bromophenyl-phenylether, ppb Hexachlorobenzene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Phenanthrene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Anthracene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Di-n-Butylphthalate, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Fluoranthene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Fluoranthene, ppb Benzidine, ppb	· ·	5.00		625	BN625	HERBE31	10/10/2011	
Pyrene, ppb	<	5.00 5.00	EPA		BN625	HERBE31	10/10/2011	
Butylbenzylphthalate, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Chrysene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
3,3'-Dichlorobenzidine, ppb	<	5.00	EPA EPA		BN625	HERBE31	10/10/2011	
Benzo (a) Anthracene, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	
Bis(2-ethylhexyl) Phthalate, ppb	<	5.00	EPA		BN625	HERBE31	10/10/2011	16,
ppo	•	3.00	೧೯೮	V2J	BN625	HERBE31	10/10/2011	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803 Description :INTAKE

Sample Date: 09/14/2011

Unit: 0

Note: < value = N.D. at value (MDL)

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Di-n-octyl Phthalate, ppb Benzo (b) fluoranthene, ppb Benzo (k) fluoranthene, ppb Benzo (a) pyrene, ppb Indeno (1 2 3-cd) pyrene, ppb Dibenzo (a h) anthracene, ppb Benzo (g h i) perylene, ppb Gross Alpha, pCi/L Gross Beta, pCi/L Uranium as U, ppb	< 5.00 < 5.00 < 5.00 < 5.00 < 5.00 < 5.00 < 5.00 < 0.749 1.480 < 0.21	EPA 625 EPA 625 EPA 625 EPA 625 EPA 625 EPA 625 EPA 625 EPA 900.0 EPA 900.0	BN625 BN625 BN625 BN625 BN625 BN625 BN625 RADIO RADIO UPPB	HERBE31 HERBE31 HERBE31 HERBE31 HERBE31 HERBE31 HERBE31 HERBE31 HERBE31	10/10/2011 10/10/2011 10/10/2011 10/10/2011 10/10/2011 10/10/2011 10/10/2011 09/23/2011 09/23/2011 09/29/2011	1659 1659 1304

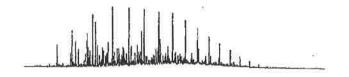
418864

Samples rec'd on ico

	Location: Required Date Comment:	Possumile: 60 days		Hhi		Phon	ested by: e: oled by:	WGB						Priority Date A	nalysis			16/2	5/11	1/1	15	(1.91)	
	Bottle Types:	-TOC=Total	Organic Carbon	TSS=Tot	al Suspen	ties, Ma ded Sali	idololo, A=(A ido, B, F, NO ₃ N	mmoria,TKN,TP,COD,N IO ₂ ,SO,TOS,Chieside)	O'MOT B	VOD≃81	ialogļ	sal Oxý	gen De	mand				k.				t)	
			Base Noutrals, F														Cons	ider.		. 2	7.5		
	Preservatives	: HCI=Hydroc	thoric acid, CS	=Cu Sutinte	, S=Suffu	rte acid.	N=Nitric acid	ZA=Zinc ecetate, SH=S	odium Hyd	hoxide							Tem;	(W+S	5)	_6	8		
	Tests Require	d 1= O/G. P 2= [TSS. 7	hand total, Vo	olatiles, (Al DyNO ₂ , Ni	mmonia; Irale N, (TKN, T	P. COD. NO	NOJ, TOC		ic G		Ñ	OTE:	7			TRC	4		Ē	CUL		
		4= TR and	l Diss Metals	Al:Ba,Co,F	e,Mg,Mo	Mn Si	n,Tī,Sþ,As,B	le.Çd.Çr.Cu,Pb,Hg,Ni,	Şe,Ag,Tl	,Zn +	Haro	ness							3	ant.			
	X - PLACE AN Preservative	HT NI "X" V	E BOX FOR	SAMPLE	S TO B	E.SUB	MITTED			HCI	cs	S HC	N S			Ι	HCI	7		9		<i>y.</i>	
	System Lab Number	Sample ID	Sample Date	Sample:	Comp	Grab	Cl ₂ Screen	Dechlor conf imed?		0/0	3 P	TV	M	BOD			тос	TSS	ABN	P/P	Ted Required	4 Notes	
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		-	-	-	-	-			pt. 739	+	F	+	H	经销	+	1	-	3.95	海東	A POPULA	4		
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ı	Relinquished ((Signature)	WA	K-	L	This	Tu	Time da	0930	(S	ceive ignatu	rre)	Z	_ 1	81/ 81/	ب تحدی	_ 		5.11		_		Dominion Resources Laboratory Services	
	Relinquished l (Signature)	by:			Date		Time			celve ignatu				Post of Co.			Date		Time		60v.	Common Resources Laboratory Services 11202 Old Stage Road Chester, VA 23836	

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306



ANALYTICAL LABORATORY REPORT

12-Oct-11

Dominion Virginia Power Attn: Glenn Bishop 4111 Castlewood Road Richmond, Va. 23234

Date Received:

15-Sep-11

Date Sampled:

14-Sep-11

Work Order No:

1109136-01

391.103

Client ID:	Outfall Possi	um Intake	1165			
Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.01	0.01	mg/L	4500CN E	16-Sep-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	5-Oct-11	HV
1,2 Diphenylhydrazine	<0.1	0.1	ug/L	526	10-Oct-11	HV
BOD	<3.0	3.0	mg/L	5210 B	16-Sep-11	РВ
Hexavalent Chromium	<0.005	0.005	mg/L	3500	at 13:00 15-Sep-11	NA
Bromide	5.9	0.1	mg/L	Titrimetric	at 9:30 28-Sep-11	PB
Color	35.0	5.0	PCU	2120 B	15-Sep-11	NA
MBAS	<0.01	0.01	mg/L	5540C	at 16:00 16-Sep-11	HV
Metals Chromium III	<0.02	0.02	mg/L	3120 B	26-Sep-11	HV

12-Oct-11

Date Sampled: Work Order No:

14-Sep-11

Client ID:

1109136-01 Outfall Possum Intake

Client ID:	Outfall Possi	ım Intake				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Initials
Pesticides					raidiyeed	nitidia
Aldrin	<0.05	0.05	ug/L	608	5-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	608	5-Oct-11	HV
Dieldrin	< 0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endrin	<0.10	0.10	ug/L	608	5-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	608	5-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	608	5-Oct-11	HV
Delta-BHC	< 0.05	0.05	ug/L	608	5-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	608	5-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	608	5-Oct-11	HV
Kepone	<0.10	0.10	ug/L	608	5-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	608	5-Oct-11	HV
Mirex	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	608	5-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	608	5-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	608	5-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	608	5-Oct-11	HV
					- 55, . ,	.,,

Date Sampled:

Work Order No:

14-Sep-11

1109136-01

Client ID: Outfall Possum Intak

Gridine ID.	Outiali Posst	ım ıntake				
Test Description	Final Result	Reporting Limit	Units of Measure	Standard Methods (18)	Date Analyzed	Tech. Initials
Herbicides 2,4-D 2,4,5-TP (Silvex)	<0.010 <0.002	0.010 0.002	mg/L mg/L	615 615	10-Oct-11 10-Oct-11	HV HV

12-Oct-11

Date Sampled:

14-Sep-11

Work Order No:

1109136-01

Client ID:

Outfall Possum Intake

ONOTIC TO.	Outlan 1 044	MILL HILLAND				
Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech.
Organophosphorus					7 illuly200	miliais
Pesticides	,	N .				
Diazinon	<1	1	ug/L	622	23-Sep-11	\$C**
Demeton	<1	1	ug/L	622	23-Sep-11	\$C**
Malathion	<1	1	ug/L	622	23-Sep-11	SC**
Chlorpyrifos	<0.2	0.2	ug/L	622	23-Sep-11	SC**
Parathion	<1	1	ug/L	622	23-Sep-11	SC**
Guthion	<1	1	ug/L	622	23-Sep-11	SC**

^{**} Analysis sub-contracted.

Method Numbers*:

EPA 625

Date Analyzed:

10-Oct-11

Technician:

HV

Units of Measure:

ug/L

Date Sampled:

14-Sep-11

Work Order No:

1109136-01

Client ID:

Outfall Possum Intake

Client ID:	Outfall Possum Intake						
Test	Final	Detection					
Description	Result	Limit					
Acenaphthene	<5.0	5.0					
Acenaphthylene	<5.0	5.0					
Anthracene	<5.0	5.0					
Benzidine	<5.0	5.0					
Benzo(a) anthracene	<5.0	5.0					
Benzo(b) fluoranthene	<5.0	5.0					
Benzo(k) fluoranthene	<5.0	5.0					
Benzo(g,h,i) perylene	<5.0	5.0					
Benzo(a)pyrene	<5.0	5.0					
bis-(2-Chloroethoxy)methane	<5.0	5.0					
bis-(2-Chloroethyl)ether	<5.0	5.0					
bis-(2-Chloroisopropyl)ether	<5.0	5.0					
bis-(2-Ethylhexyl)phthalate	<5.0	5.0					
4-Bromophenyl phenyl ether	<5.0	5.0					
Butyl benzyl phthalate	<5.0	5.0					
2-Chloronaphthalene	<5.0	5.0					
4-Chloro-3-methylphenol	<5.0	5.0					
2-Chlorophenol	<5.0	5.0					
4-Chlorophenyl phenyl ether	<5.0	5.0					

12-Oct-11

Method Numbers*:	EPA 625 (con't)
Date Analyzed:	10-Oct-11
Technician:	HV
Units of Measure:	ug/L
Date Sampled:	14-Sep-11
Work Order No:	1109136-01

Client ID:	Outfall Possum Intake					
Test	Final	Detection				
Description	Result	Limit				
Chrysene	<5.0	5.0				
Dibenzo(a,h)anthracene	<5.0	5.0				
Di-n-butyl phthalate	<5.0	5.0				
1,2-Dichlorobenzene	<5.0	5.0				
1,3-Dichlorobenzene	<5.0	5.0				
1,4-Dichlorobenzene	<5.0	5.0				
3,3-Dichlorobenzidine	<5.0	5.0				
2,4-Dichlorophenol	<5.0	5,0				
Diethyl phthalate	<5.0	5.0				
2,4-Dimethylphenol	<5.0	5.0				
Dimethyl phthalate	<5.0	5.0				
4,6-Dinitro-2-methylphenol	<5.0	5.0				
2,4-Dinitrophenol	<5.0	5.0				
2,4-Dinitrotoluene	<5.0	5.0				
2,6-Dinitrotoluene	<5.0	5.0				
Di-n-octylphthalate	<5.0	5.0				
1,2-Diphenylhydrazine	<5.0	5.0				
Fluoranthene	<5.0	5.0				
Fluorene	<5.0	5.0				
Hexachlorobenzene	<5.0	5.0				
Hexachlorobutadiene	<5.0	5.0				
Hexachlorocyclopentadiene	<5.0	5.0				
Hexachloroethane	<5.0	5.0				
Indeno(1,2,3-cd) pyrene	<5.0	5.0				
Isophorone	<5.0	5.0				
Naphthalene	<5.0	5.0				
Nitrobenzene	<5.0	5.0				
2-Nitrophenol	<5.0	5.0				
4-Nitrophenol	<5.0	5.0				
N-Nitrosodimethylamine	<5.0	5.0				
N-Nitrosodiphenylamine	<5.0	5.0				
N-Nitrosodi-n-propylamine	<5.0	5.0				
Pentachlorophenol	<5.0	5.0				

12-Oct-11

Method Numbers*: EPA 625 (con't)
Date Analyzed: 10-Oct-11
Technician; HV
Units of Measure: ug/L
Date Sampled: 14-Sep-11

Work Order No: 1109136-01

Client ID:	Outfall Possum Intake								
Test	Final	Detection							
Description	Result	Limit							
Phenanthrene	<5.0	5.0							
Phenol	<5.0	5.0							
Pyrene	<5.0	5.0							
1,2,4-Trichlorobenzene	<5.0	5.0							
2,4,6-Trichlorophenol	<5.0	5.0							

^{*} All methods are Standard Methods 18th Edition unless otherwise noted.

Signature: Date: 10/13/17
Parry L. Bragg
Laboratory Manager

These analytical results are based upon materials provided by the client and are intended for the exclusive use of the client. These analytical results represent the best judgement of Primary Laboratories, Inc. Primary Laboratories, Inc. assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report. This report is not to be reproduced except with the written approval of Primary Laboratories, Inc.

1109138-1

Location: Possum Point	Requested by:	Priority:					
Regulted Date: 30 days / 4/11	Phone:	Date Anglysis Complete:					
Comment:	Sampled by:	Date Approved Released:					

9-29

Bottle Types: Cs÷Cyonide, FC = Fecals; EC = E coli, H₂S = Hydrogen sulfido, Asti = Ashestos, 800 = Blological Oxygen Domend

P/P=Perficide / PCBs; TBT; = Tributyklin, R = Redinactivity, Br = Bromate, Color; Sul = sulfade, Sur = Surfactoria, OS = Dickin scroter

Preservatives: HCI=Hydrochionic acid, CS=Cui Sutfate, S=Suffate, ncid, N=Nitric acid, ZA=Zinc acotate, SH*Sodium Hydroxide

Tests Required 1= Cn, H. S. BOD, Pest / PCBs, ABN, Novylabored, [1.2.Diphenylnydrazina]

2 = Cr3, Cr6

3= [Br. Color], Sulfide, Surfactants

X - PLACE A Preservative	M.X.IN-UH	E BOX FOR	SAMPLE	ES TO E	BE SU	SMITTED			SH			Za,sh									ZÁSH				1 1.9°C
System Lab Number	Sample D	Sample Date	Sample Time	Сать	4		Dochtor conf	Suffice Screen [Cn]	Ca	FC	EC	H ₂ S	Asb	BOD	PIP	ABN	Vonytahenal	1.2.Diphenythydrazine	bra, cre	år, Color	Sul	Sur	os	Test Roquired	
	Possum	7/1-Hu			x	Pos ratego	Yestern.	Pas / Ing:	-			2		1	2	1	1	1	2	ī	2	1		1,2,3	Do Pesi / PCBs per attached list
	Intake		1350							!			7		255° 2										For 1,2 Diphenylhydrazine, use Method 526 at 0 = 0.1 ppb
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Relinquished i 'Signature)	by:			Date		Time				Recei (Signa	ved slur	by P	B	1,M	uss		90°	15	ii	Timo	8	: 14	5		Primary Laboratories 7423 Lee Davis Road Mechanips ville, VA 221111 804:559-0004



Pace Analytical Services, Inc. 1638 Roseylown Road - Sultes 2,3,4 Greensburg, PA 15601 (724)850-5600

October 06, 2011

Mr. Glenn Blshop Dominion Environmental Biology 4111 Castlewood Road Richmond, VA 23234

RE: Project: Possum Intake

Pace Project No.: 3053968

392803

Dear Mr. Bishop:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com Project Manager

Enclosures





Pace Analytical Services, Inc. 1838 Roseytówn Road - Sultes 2,3,4 Greensburg, PA 15601 (724)850-5600

CERTIFICATIONS

Project:

Possum Intake

Pace Project No.:

3053968

Pennsylvania Certification IDs 1638 Roseytown Road Suites 2,3&4, Greensburg, PA

15601

Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH 0694

Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification

Idaho Certification

Illinois/PADEP Certification Indiana/PADEP Certification

Iowa Certification #: 391

Kansas/NELAC Certification #: E-10358

Kentucky Certification #: 90133

Louisiana/NELAC Certification #: LA080002 Louisiana/NELAC Certification #: 4086

Maine Certification #: PA0091 Maryland Certification #: 308

Massachusetts Certification # M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235 Montana Certification #: Cert 0082

Nevada Certification

New Hampshire/NELAC Certification #: 2976

New Jersey/NELAC Certification #: PA 051

New Mexico Certification

New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification

Tennessee Certification #: TN2867

Texas/NELAC Certification #: T104704188-09 TX

Utah/NELAC Certification #: ANTE Virgin Island/PADEP Certification

Virginia Certification #: 00112

Washington Certification #: C1941

West Virginia Certification #: 143 Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

Page 2 of 10



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15801 (724)850-5600

SAMPLE SUMMARY

Project:

Possum Intake

Pace Project No.:

3053968

Lab ID

Sample ID

Matrix

Date Collected

Date Received

3053968001

Possum Intake

Water

09/14/11 13:50

09/16/11 10:00



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SAMPLE ANALYTE COUNT

Project:

Possum Intake

Pace Project No.:

3053968

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
3053968001	Possum Intake	EPA 900.0m	JAL	2	
		ASTM D5174:97	RMK-	. 1	



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PROJECT NARRATIVE

Project:

Possum Intake

Pace Project No.:

3053968

Method:

EPA 900.0m

Description: 900.0 Gross Alpha/Beta

Dominion Environmental Biology

Cilent: Date:

October 06, 2011

General Information:

1 sample was analyzed for EPA 900.0m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoverles and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3:4 Greenaburg, PA 15601 (724)850-5600

PROJECT NARRATIVE

Project:

Possum Intake

Pace Project No.:

3053968

Method:

ASTM D5174,97

Description: D517497 Total Uranium KPA

Cllent:

Dominion Environmental Biology

Date:

October 06, 2011

General Information:

1 sample was analyzed for ASTM D5174.97. All samples were received in acceptable condition with any exceptions noted below.

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

ANALYTICAL RESULTS

Project:

Possum Intake

Pace Project No.:

3053968

Sample: Possum Intake

Gross Beta

Total Uranium

Lab ID: 3053968001

Collected: 09/14/11 13:50 Received: 09/16/11 10:00 Matrix: Water

CAS No.

Qual

PWS:

Site ID:

Method

Sample Type:

Act ± Unc (MDC)

Parameters Gross Alpha

EPA 900.0m EPA 900.0m ASTM D5174.97

0.0176 ± 0.419 (0.749) 1.48 ± 0.541 (0.724) $0.183 \pm 0.004 (0.210)$

pCi/L pCI/L ug/L

Units

09/23/11 16:59 12587-46-1 09/23/11 16:59 12587-47-2 09/29/11 13:04 7440-61-1

Analyzed

Data: 10/06/2011 03:34 PM



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project;

Possum Intake

Pace Project No.:

3053968

QC Batch:

RADC/9568

Analysis Method:

ASTM.D5174.97

QC Batch Method.

ASTM D5174.97

Analysis Description:

D5174.97 Total Uranium KPA

Associated Lab Samples:

Matrix: Water

METHOD BLANK: 345460 Associated Lab Samples:

3053968001

3053968001

;Act ± Unc (MDC)

Units

Analyzed

Qualifiers

Parameter Total Úranium

0.067 ±:0.003 (0.210)

ug/L

09/26/11 16:47

Date: 10/06/2011 03:34 PM



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 16801 (724)850-5800

QUALITY CONTROL DATA

Project:

Possum Intake

Pace Project No.:

3053968

QC Batch:

RADC/9572

Analysis Method:

EPA 900.0m

QC Batch Method:

EPA 900.0m

Analysis Description:

900.0 Gross Alpha/Beta

Associated Lab Samples: 3053968001

METHOD BLANK: 345464

Matrix: Water

Associated Lab Samples:

3053988001

Parameter |

Act: ± Unc (MDG)

Units

Analyzed

Qualiflers

Gross Alpha Gross Beta

-0.001 ± 0.676 (1.85) 0:458 ± 0.812 (1:84)

pCi/L pCl/L

09/23/11 15:25 09/23/11 15:25

Date: 10/06/2011 03:34 PM



Pace Analytical Services, Inc. 1838 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

QUALIFIERS

Project:

Possum Intake

Pace Project No.:

3053968

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relovant fields must be completed accurately.

-	d Client information:		Section Required	Proje								tion ce Inf	C formal	None .													Pag	er 1		of	1	
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Sample Condition Upon Receipt

Face Analytical

Project # 3053968 Client Name Dom Env Biology

Custody Seal on Cooler/Box Present:	Courter: Fed Ex DUPS DUSPS Clien Tracking #: 12024975 019 3213	3cc 5 Proj. Due Date:
Packing Material: Bubble Wrap Bubble Bags None Other Other Thermometer Used 3 5 Type of Ice: Wet Blue Johns Samples on inc. cooling process has begue Thermometer Used 3 5 Type of Ice: Wet Blue Johns Samples on inc. cooling process has begue Thermometer Used 3 5 Type of Ice: Wet Blue Johns Samples on inc. cooling process has begue The Timp should be above freeding to 0°C Comments: Chain of Custody Present Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Chain of Custody Pilled Out: Syes Divo Divo Control Containers Used: Divo Divo Divo Control Containers Used: Divo Divo Control Containers Used: Divo Divo Control Containers Used: Divo Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo Control Containers Used: Divo	Custody Seal on Cooler/Box Present: Tyes	no Seals intact ves no
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exceptions: VOA, colliform, TOC, QSG, WI-ORO (water) Samples checked for dechlorination: Ves No No No No Headspace in VOA Vials (>6mm): Ves No No No No Headspace in VOA Vials (>6mm): Ves No No No No Trip Blank Present: Ves No No No Pace Trip Blank Lot # (if purchased): Cillent Notification/ Resolution: Person Contacted: Date/Time: Comments/ Resolution: Date/Time: Project Manager Review: Date: Date: Date: Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina QENNR		A12
Samples checked for dechlorination:		
Headspace in VOA Vials (>6mm):		
Trip Blank Present: Yes No Null		
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F-ALLC003-4 23Feb2010

VPDES Permit Application Addendum

Authorization for Public Notice Billing

Permit Fee Billing Information

VPDES Permit Application Addendum

- 1. Entity to whom the permit is to be issued: <u>Virginia Electric & Power Company</u>
 Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
- 2. Is this facility located within city or town boundaries? No
- 3. What is the tax map parcel number for the land where this facility is located? 8288-96-2368
- 4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? <1 acre.
- 5. ALL FACILITIES: What is the design average flow of this facility? 234.4 MGD Industrial facilities: What is the max. 30-day avg. production level (include units)? 547,463.5 MWh

In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? No

If $\Box Yes \Box$, please specify the other flow tiers (in MGD) or production levels: n/a Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

6. Nature of operations generating wastewater: Steam Electric Generation

	\leq 0% of flow from domestic connections/sources Number of private residences to be served by the wastewater treatment facilities: \underline{X} 01-4950 or more
	≥100% of flow from non-domestic connections/sources
7.	Mode of discharge: X ContinuousIntermittentSeasonal Describe frequency and duration of intermittent or seasonal discharges: N/A
8.	Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
	X Permanent stream, never dry
	Intermittent stream, usually flowing, sometimes dry
	Ephemeral stream, wet-weather flow, often dry
	Effluent-dependent stream, usually or always dry

9. Approval Date(s):

__Other:___

O & M Manual 5/9/2008.

Sludge/Solids Management Plan N/A

__ Lake or pond at or below the discharge point

Have there been any changes in your operations or procedures since the above approval dates? An updated O&M manual was submitted for review in March 2012

AUTHORIZATION FOR PUBLIC NOTICE BILLING

TO

VPDES PERMIT APPLICANT



I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in the News & Messenger.

Authorizing Agent:

Applicant's Address: Cathy C. Taylor

Dominion

5000 Dominion Blvd. Glen Allen, VA 23060

Telephone Number: 804/273-2929

Permit No. VA0002071 Attn: Susan Mackert

Sampling Plans

&

Sampling Plan Approvals



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY NORTHERN REGIONAL OFFICE 13901 Crown Court, Woodbridge, Virginia 22193

Douglas W. Domenech 1390 Secretary of Natural Resources

3901 Crown Court, Woodbridge, Virginia 22193 (703) 583-3800 Fax (703) 583-3821 www.deq.virginia.gov David K. Paylor Director

Thomas A. Faha Regional Director

July 27, 2011

Ms. Cathy C. Taylor
Director, Electric Environmental Services
Dominion Virginia Power
5000 Dominion Boulevard
Glen Allen, VA 23060

Re:

Dominion - Possum Point Power Station, VPDES Permit No. VA0002071

Dear Ms. Taylor:

Thank you for your correspondence dated June 13, 2011, regarding sampling and testing waivers associated with the referenced VPDES permit reissuance application. Staff has reviewed Dominion's sampling and testing waiver request and has the following comments.

Waiver Request - Outfall 001/002

Dominion requests that the requirement for 24-hour composite sampling be waived for Outfalls 001 and 002.

Staff Response

Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfalls 001 and 002. As such, the 24-hour composite sampling requirement is waived for Outfalls 001 and 002.

Waiver Request - Outfall 001/002

Dominion requests that fecal coliform sampling be waived for Outfalls 001 and 002.

Staff Response

The discharges from Outfall 001 and Outfall 002 are considered industrial in nature. Fecal coliform is not considered a parameter of concern with these industrial discharges. As such, the monitoring for fecal coliform is waived at Outfall 001 and Outfall 002.

Waiver Request - Outfall 003

Dominion requests that the requirement for 24-hour composite sampling be waived for Outfall 003.

Staff Response

Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfall 003. As such, the 24-hour composite sampling requirement is waived for Outfall 003.

VA0002071 Response to Waiver Request Page 2 of 3

Waiver Request - Outfall 003

Dominion requests that fecal coliform sampling be waived for Outfall 003.

Staff Response

The discharge from Outfall 003 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 003.

Waiver Request - Outfall 004

Dominion requests that fecal coliform sampling be waived for Outfall 004.

Staff Response

The discharge from Outfall 004 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 004.

Waiver Request - Outfall 005

Dominion requests that fecal coliform sampling be waived for Outfall 005.

Staff Response

The discharge from Outfall 005 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 005.

Sampling Request - Outfall 201

Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response

Staff has no objection to limiting the parameters monitored for internal Outfall 201 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Sampling Request - Outfall 202

Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response

Staff has no objection to limiting the parameters monitored for internal Outfall 202 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Sampling Request - Outfall 501

Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response

Staff has no objection to limiting the parameters monitored for internal Outfall 501 to those parameters monitored in the effective VPDES permit. The discharge from internal Outfall 501 is addressed under Federal Effluent Guidelines established in 40 CFR Part 423 – Steam Electric Power Generating Point Source Category. Monitoring requirements established under this Federal Effluent Guideline are currently reflected in the effective VPDES permit for this internal outfall. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

VA0002071 Response to Waiver Request Page 3 of 3

Sampling Request - Outfall 502

Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff has no objection to limiting the parameters monitored for internal Outfall 502 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are

Waiver Request - Outfall 007/008

Dominion requests that the requirement for 24-hour composite sampling be waived for Outfalls 007 and 008.

Staff Response

Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfalls 007 and 008. As such, the 24hour composite sampling requirement is waived for Outfalls 007 and 008.

Waiver Request - Outfall 007/008

Dominion requests that fecal coliform sampling be waived for Outfalls 007 and 008.

Staff Response

The discharges from Outfall 007 and Outfall 008 are considered industrial in nature. Fecal coliform is not considered a parameter of concern with these industrial discharges. As such, the monitoring for fecal coliform is waived at Outfall 007 and Outfall 008.

If you have any questions, please contact Susan Mackert at (703) 583-3853 or by email at susan.mackert@deq.virginia.gov.

Respectfully,

Bryant Thomas

Water Permits Manager

VA0002071 - Reissuance File cc:

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060 Web Address: www.dom.com



Certified Mail Return Receipt Requested

June 13, 2011

Ms. Susan Mackert DEQ-Northern Regional Office 13901 Crown Court Woodbridge, VA 22193

RE: Dominion Possum Point Power Station

VPDES Permit No. VA0002071

Permit Reissuance Application Sampling Plan and Waivers Request

Dear Ms. Mackert:

Dominion is preparing an application to renew the Possum Point Power Station's VPDES permit (VA0002071). This current permit expires on October 23, 2012. In accordance with the requirements as we understand them, we have developed the attached sampling plan to include the upcoming work planned for this facility and the waivers requested. We plan to report analytical data from three years of discharge monitoring reports (2009-2011) for the parameters currently limited in the VPDES permit for each outfall. We plan to conduct the majority of our permit application sampling and analyses in the July-August, 2011 timeframe.

Dominion appreciates this opportunity to review these requirements and coordinate our sampling plan with your agency. If you have any questions, please contact Oula Shehab-Dandan at (804) 273-2697.

Sincerely,

Cathy C. Taylor

Director, Electric Environmental Services

Attachment

Outfall	EPA Form	Parameters	Data Source To Be	Waiver
			Used	Requested
001/002 - Seal Pit and Unit 3	2C - Part A	Flow, pH, Temperature	DMRs	NA
Non Contact Cooling Water		Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
3	2C - Part B	TRC	DMRs	NA
	B	Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B	Field sampling - Grab	Grab to replace
	2C - Part C	Dioxin	Believed absent	NA
	¥	Remaining Part C Parameters	Field sampling - Grab	Grab to replace 24hc
	VA – WQS	Uranium, H ₂ S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling - Grab	Grab to replace 24hc
		твт	Believed absent	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
003 - Unit 4 Non Contact Cooling	2C - Part A	Flow, pH, Temperature	DMRs	NA
Water	±	Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
	2C - Part B	TRC, Dissolved Cu	DMRs	NA
	4	Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B	Field sampling - Grab	Grab to replace
	2C - Part C	Dioxin	Believed absent	NA
		Remaining Part C	Field sampling - Grab	Grab to replace
	VA – WQS	Uranium, H ₂ S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	Grab to replace 24hc
	8	ТВТ	Believed absent	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
004 – Low Volume Waste Settling Basin	2C - Part A	Flow, pH, TSS, Ammonia, Temperature	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C - Part B	TRC, Total P, O&G, TKN, NO ₃ /NO ₂	DMRs	NA
	(W)	Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
	+	Remaining Part B Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C - Part C	Dioxin	Believed absent	NA
		Remaining Part C	Field sampling - Grab	NA- retention > 24 hrs
	VA – WQS	Uranium, H ₂ S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	NA- retention > 24 hrs
		TBT	Believed absent	NA
	Other	Total N	DMRs	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
	2C - Part A	Flow, pH, Ammonia, TSS	DMRs	NA
005 - Ash Pond E	0	Remaining Part A Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C Part B	Oil and Grease, TRC, TKN, NO ₃ /NO ₂ , Total phosphorus	DMRs	NA
		Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
	75	Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C - Part C	Dioxin	Believed absent	NA
	ą.	Remaining Part C Parameters	Field sampling - Grab	NA- retention > 24 hrs
	VA – WQS	Uranium, H ₂ S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	NA- retention > 24 hrs.
		TBT	Believed absent	NA
	Other	Total Nitrogen	DMRs	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
201 – Unit 5 Cooling Tower Blowdown	2C – Part A	Flow, pH	DMRs	NA
Existing DMR data	2C – Part B	FAC, Cr, Zn	DMRs	NA
will be submitted for Form 2C parameters. No	2C – Part C	NA	NA	NA
additional testing will be performed as this is an	VA – WQS	NA	NA	NA
internal outfall.				

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
202 - Unit 6 Cooling Tower Blowdown	2C - Part A	Flow, pH	DMRs	NA
Existing DMR data will be submitted	2C - Part B	FAC, Cr, Zn	DMRs	NA
for Form 2C parameters. No additional testing	2C - Part C	NA	NA	NA
will be performed as this is an internal outfall.	VA – WQS	NA	NA	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
501 – Metals Cleaning Waste Basin	2C - Part A	Flow, TSS	DMRs	NA
Existing DMR data will be submitted	2C - Part B	Oil and Grease, Fe, Cu	DMRs	NA
for Form 2C parameters. No additional testing	2C - Part C	NA	NA	NA
will be performed as this is an internal outfall.	VA – WQS	NA	NA	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
502 – Oily Waste Pond	2C - Part A	Flow	DMRs	NA
Existing DMR data will be submitted	2C - Part B	NA	NA	NA
for Form 2C parameters. No additional testing	2C - Part C	NA	NA	NA -
will be performed as this is an	VA – WQS	NA	NA	NA
internal outfall.	Other	TPH	DMRs	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
	2C - Part A	Flow	DMRs	NA
007 & 008 – Intake Screen		Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
Backwash Water	2C - Part B	Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	Grab to replace 24hc
	2C - Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	Grab to replace 24hc
	VA – WQS	Uranium, H ₂ S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	Grab to replace 24hc
		TBT	Believed absent	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
	2C - Part A	Flow	No data	NA
Intake		Remaining Part A Parameters	Field sampling - Grab	NA
	2C - Part B	Fecals, Sulfite	No testing	NA
rt.		Remaining Part B Parameters	Field sampling - Grab	NA:
	2C - Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	NA
	VA – WQS	Uranium, H ₂ S, Nitrate N,	Field sampling – Grab	NA
		Chlorides, TDS, Pesticides / PCBs		*
	3	TBT	Believed absent	NA

From:

Mackert, Susan (DEQ)

To:

Oula K Shehab-Dandan (Services - 6)

Cc:

Jeffrey R Marcell (Generation - 3); Glenn Bishop (Services - 6); Kenneth Roller (Services - 6)

Subject:

RE: Possum Point Power Station VA0002071 Monday, January 09, 2012 10:44:38 AM

Attachments:

image001.png

Hi Oula,

We have no objection to the sampling plan that Dominion has proposed for the three representative storm water outfalls for Possum Point.

Please don't hesitate to contact me should you have any further questions or concerns. Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Phone: (703) 583-3853
Fax: (703) 583-3821

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]

Sent: Monday, January 09, 2012 9:01 AM

To: Mackert, Susan (DEQ)

susan.mackert@deq.virginia.gov

Cc: Jeffrey R Marcell; Glenn Bishop; Kenneth Roller Subject: Possum Point Power Station VA0002071

Hi Susan,

I am currently working on the Possum Point Permit VPDES application and realized that the sampling plan and waiver request that we submitted did not include storm water outfalls sampling.

We are proposing to follow the same sampling plan that was approved by VDEQ in the previous permit application (2005). We are proposing to collect grab samples at 3 representative storm water discharges (**S4** located between Unit 5 CTs, **S61** located near 001/002, **S42** located between Units 4 & 5). We would like to sample the outfalls as soon as possible. Please review the attached sampling plan and let me know if you have any comments. You quick review and approval will be greatly appreciated.

Oula Shehab-Dandan Environmental Consultant Electric Environmental Services

Dominion Resources Inc.

5000 Dominion Boulevard Glen Allen VA 23060 Phone: 804-273-2697 Tie line 8-730-2697 oula.k.shehab-dandan@dom.com



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Possum Point Power Station VA0004090 Proposed Form 2F Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source	Waiver Requested
S4 – Stormwater from	2F – Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S42 – Stormwater from	2F – Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F - Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling Believed absent	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Beneved absent	
S61 – Stormwater from	2F − Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	

Oula K Shehab-Dandan (Services - 6)

From: Sent: Mackert, Susan (DEQ) [Susan.Mackert@deq.virginia.gov]

Sent: To: Thursday, March 29, 2012 6:58 AM Oula K Shehab-Dandan (Services - 6)

Subject:

RE: Possum Point Power Station VA0002071-- Storm Water

Hi Oula,

DEQ has no objection to the corrections for the storm water sampling plan.

Thanks, Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Woodbridge, VA 22193 Phone: (703) 583-3853 Fax: (703) 583-3821

susan,mackert@deq.virginia.gov

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]

Sent: Wednesday, March 28, 2012 3:10 PM

To: Mackert, Susan (DEQ)

Subject: RE: Possum Point Power Station VA0002071-- Storm Water

Hi Susan, is the change ok with you?

Oula

From: Oula K Shehab-Dandan (Services - 6) Sent: Friday, March 23, 2012 9:47 AM

To: 'Mackert, Susan (DEQ)'

Cc: Kenneth Roller (Services - 6); Jeffrey R Marcell (Generation - 3) Subject: RE: Possum Point Power Station VA0002071-- Storm Water

Susan,

Per our conversation this morning, this is to correct a typographical error.

The representative storm water outfalls are \$5, \$61 and \$42. I attached the corrected sampling plan.

Thanks

Oula

From: Mackert, Susan (DEQ) [mailto:Susan.Mackert@deq.virginia.gov]

Sent: Monday, January 09, 2012 10:43 AM **To:** Oula K Shehab-Dandan (Services - 6)

Cc: Jeffrey R Marcell (Generation - 3); Glenn Bishop (Services - 6); Kenneth Roller (Services - 6)

Subject: RE: Possum Point Power Station VA0002071

Hi Oula,

We have no objection to the sampling plan that Dominion has proposed for the three representative storm water outfalls for Possum Point.

Please don't hesitate to contact me should you have any further questions or concerns. Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Phone: (703) 583-3853 Fax: (703) 583-3821

susan.mackert@deq.virginia.gov

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]

Sent: Monday, January 09, 2012 9:01 AM

To: Mackert, Susan (DEQ)

Cc: Jeffrey R Marcell; Glenn Bishop; Kenneth Roller **Subject:** Possum Point Power Station VA0002071

Hi Susan,

I am currently working on the Possum Point Permit VPDES application and realized that the sampling plan and waiver request that we submitted did not include storm water outfalls sampling.

We are proposing to follow the same sampling plan that was approved by VDEQ in the previous permit application (2005). We are proposing to collect grab samples at 3 representative storm water discharges (\$4 located between Unit 5 CTs, \$61 located near 001/002, \$42 located between Units 4 & 5). We would like to sample the outfalls as soon as possible. Please review the attached sampling plan and let me know if you have any comments. You quick review and approval will be greatly appreciated.

Oula Shehab-Dandan
Environmental Consultant
Electric Environmental Services

Dominion Resources Inc. 5000 Dominion Boulevard Glen Allen VA 23060 Phone: 804-273-2697 Tie line 8-730-2697 oula,k,shehab-dandan@dom.com

Possum Point Power Station VA0004090 Proposed Form 2F Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source	Waiver Requested
S5 – Stormwater from	2F - Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event trigger
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S42 – Stormwater from	2F - Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Grab sampling Believed absent	Waiver from qualifying storm event triggers
S61 – Stormwater from	2F – Part VII A	All Part A Parameters	Grab sampling	
Industrial Activities	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	



BY ELECTRONIC MAIL

March 24, 2016

Ms. Susan Mackert
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

RE: Dominion Possum Point Power Station VA0002071 No Discharge from Outfall 503

Ms. Mackert:

Dominion is submitting this letter in accordance with Part I.A.4.(5) of the subject permit to report that there was no discharge from Outfall 503 from March 13-19, 2016. In addition, a progress report summarizing the status of activities to the CCR Surface Impoundment Closure Project is attached with this report.

If you have any questions or need additional information, please contact Jeff Marcell at (703)-441-3813.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Station Director

<u>**Dominion – Possum Point Power Station**</u>

CCR Impoundment Closure Project

Weekly Status Report

Activities for the Week Ending: 3/19/16

• Initiated installation of office trailers on compacted rock pad at Pond D.

Ongoing Activities

- Mobilization of equipment associated with the wastewater treatment system.
- Stock piling of dry ash from Pond E within the pond footprint to facilitate future loading operations.
- Installation of electrical system associated with Pond D office trailers.
- Demolition and repair of rail track to facilitate future offsite transport of ash.
- Sealing of toe drain at Outfall S107
- Pumping of filtered water from Ponds A, B, C and E to Pond D
- Preparation of revisions to Wastewater Treatment System Concept Engineering Report (CER) to address DEQ comments.
- Preparation of CER Addendum to address effluent storage following treatment for submittal to DEQ.

Look Ahead

• Complete S107 Toe drain sealing.